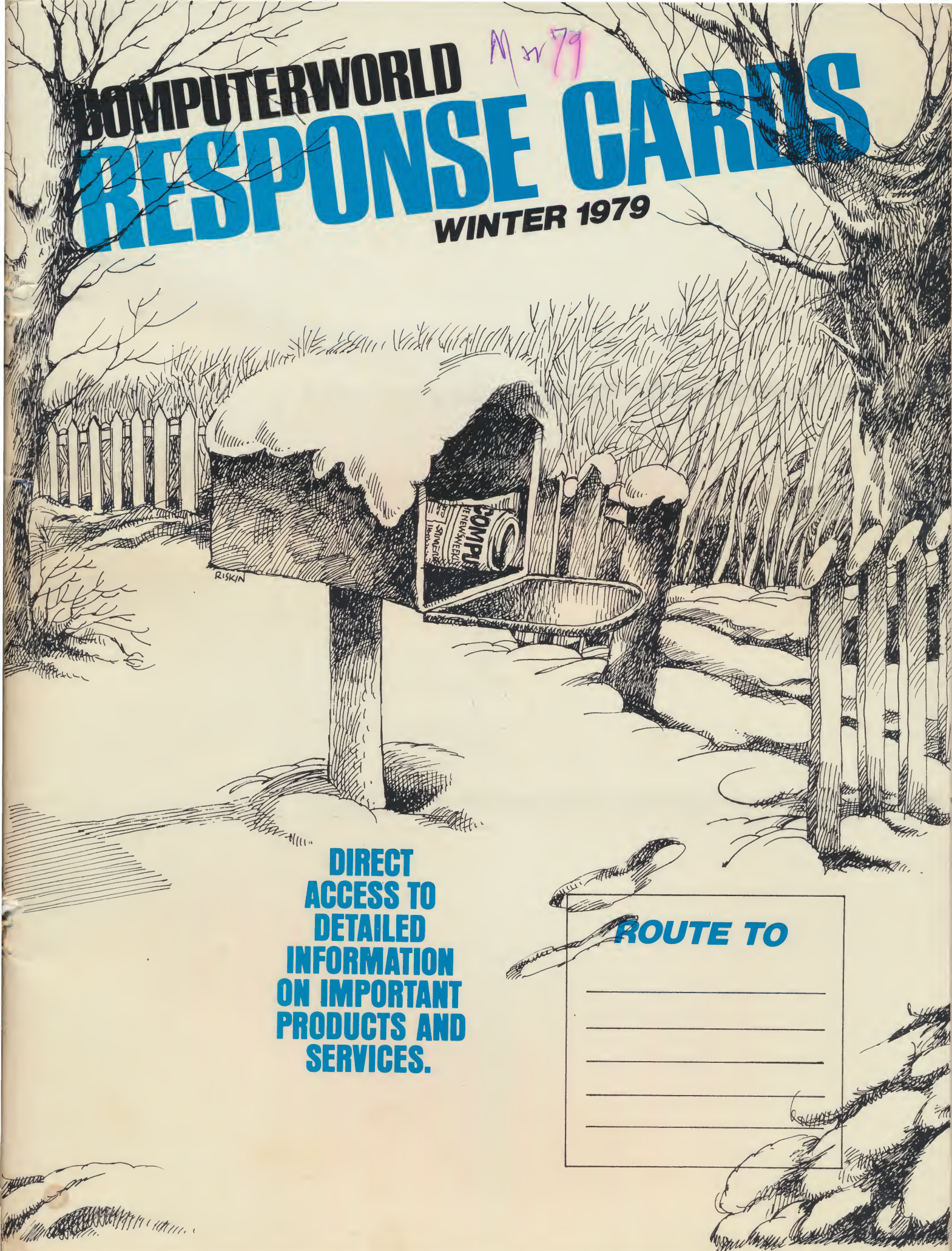


COMPUTERWORLD

RESPONSE CARDS

WINTER 1979

Mar 79



**DIRECT
ACCESS TO
DETAILED
INFORMATION
ON IMPORTANT
PRODUCTS AND
SERVICES.**

ROUTE TO

Winter issue is biggest yet; more cards, more information, same convenient response mechanisms.

This is our winter 1979 issue of *Computerworld Response Cards*, the eighth issue since we started publishing *Response Cards* in 1976, and it's our biggest yet.

More companies are offering you more information than ever before in *Response Cards* — including several companies that do not advertise in *Computerworld*. And our unusual format gives you easy access to this important information. You can use either the business reply cards, or look for the address and phone number of the advertiser on the stub portion of the cards. Even if someone has already torn out the business reply card, the stub remains for your convenience.

The index below gives you the names of the many leading companies advertising in this issue. We hope you find *Response Cards* useful, and we are always ready to hear your comments. Send them to Roy Einreinhofer, Vice President-Marketing, CW Communications/Inc., 797 Washington Street, Newton, MA 02160 (617) 965-5800.

CW RESPONSE CARD INDEX

Acme Visible Records, Inc.....	24	International Systems, Inc.....	1
American Express Co.	23	Johnson Systems, Inc.....	21
American Management Systems.....	24	Kroy Industries	13
Antron Computer Corporation	20	Management & Computer Services, Inc... 11	
Association of Small Computer Users	8	McGraw-Edison.....	23
Association of Time-Sharing Users.....	8	McGraw-Hill Book Company.....	7
Atlantic Research Corporation	11	Memorex.....	16
Auerbach Publishers Inc.	9,13,18	Mini-Computer Business Applications ...	21
Beemak Plastics	2	Moore Business Forms.....	14
BMS Computer, Inc.....	2	Nova Electric	18
Computer Concepts, Inc.....	24	Pickwick International, Inc.	24
Computer-Link Corp.....	10	Plantronics, Inc.....	15
The Computer Software Company.....	6	Q.E.D. Information Sciences, Inc.....	19
Cummins-Allison Corp.	4,22	SAS Institute Inc.....	5
Curtis Young	4	Software Design Associates, Inc.....	9
Custom Terminals Corp.	12	Software International.....	22
Dartnell	10	Software Module Marketing	20
DatagraphiX	22	Systonetics, Inc.....	9
Datapro Research Corporation	3,4,17	Tally Corporation.....	14
Datasearch Inc.	11	Tektronix	18
Dayco Corporation	20	The Texwipe Company.....	2,7
Dylakor Software Systems, Inc.....	17	Tomark	12
ElectroRent	19	Value Computing.....	5
Elgar Corporation	5	Van Nostrand Reinhold	10,14
Informatics Inc.....	17,19,23	Vertex Systems, Inc.	1
IEEE	13	John Wiley & Sons, Inc.	16
International Computer Programs, Inc....	12	Wolfe Computer Aptitude Testing.....	8
International Computer Negotiations ...	15	The Yankee Group	1

SEMINARS

Intensive two day seminars focusing on topics of industry-wide concern.

- The Impact of Xerox XTEN
March 21-22
- Integrating Public and Private Nets April 17-18
- Post Office Telecommunications: U.S./Europe/Japan May 23-24
- Second Annual Symposium on Office Automation June 20-21
- AT&T's ACS II August 14-15
- Third Annual Symposium on Electronic Mail September 12-13
- Technology Update
October 24-25

For course outlines please call
617-742-2500

the
YankeeGroup

Harvard Square
P.O. Box 43
Cambridge, MA 02138

- You thought everything was going well.
- You got home on time for dinner all last week.
- You even had a vacation planned for next month.

AND THEN YOUR BOSS ASKED "WHAT IF"

- Don't be left in the dark when it comes to managing projects.
- The PAC II Project Management System can turn on the lights.

PAC II

International Systems Inc.
890 Valley Forge Plaza
King of Prussia, Pa. 19406
(215) 265-1550



Please send me information that will show me how the PAC II System will turn on the lights on my projects.

Name _____

Organization _____

Address _____

City _____

State _____ Zip _____

Telephone and Area Code _____

☐ Please schedule a presentation of the PAC II System.



... Simplifies
all your
Sales and Use
Tax Billing!

**Want to
Automate
your
Sales Tax
Billing?**

Call 215-687-9060
or Mail This Card
for more
Information!

Please send me more no-obligation information about the SALESTAX magnetic tape tax service.

Name _____ Title _____
Company _____ Tel. No. (_____) _____
Address _____
City _____ State _____ Zip _____

Then Subscribe
to...



... The
Magnetic Tape File
that Solves your Tax
Maintenance Problems!

COMPLETE: Contains sales and use tax rates for each and every U.S. jurisdiction. **ACCURATE:** Professionally researched tax legislation assures correct and dependable information. **CURRENT:** An updated, 9-track, 800 or 1600 BPI, non-returnable tape is issued to subscribers every month. **COMPREHENSIVE:** Offers multiple code identifications to choose from (FIPS, ZIP & GSA) ... for over 40,000 U.S. cities and towns. **PROVEN:** Hundreds of firms in many industries subscribe to the VERTEX tax tables in magnetic tape or hardcopy format, including FORD MOTOR, BURROUGHS, AT&T, CBS, CELANESE, EXXON, BANK AMERICA

CWG-W79

YankeeGroup

SEMINARS

Intensive two day seminars focusing on topics of industry-wide concern.

- The Impact of Xerox XTEN
March 21-22
- Integrating Public and Private
Nets April 17-18
- Post Office Telecommunications:
U.S./Europe/Japan May 23-24
- Second Annual Symposium on
Office Automation June 20-21
- AT&T's ACS II August 14-15
- Third Annual Symposium on Elec-
tronic Mail September 12-13
- Technology Update
October 24-25

For course outlines please call
617-742-2500

the
YankeeGroup
Harvard Square
P.O. Box 43
Cambridge, MA 02138



FIRST CLASS

PERMIT No. 135

King of Prussia, Pa.

BUSINESS REPLY MAIL

No Postage Stamp Necessary if Mailed in the United States

Postage Will Be Paid By

INTERNATIONAL SYSTEMS, INC.

890 Valley Forge Plaza

King of Prussia, Pennsylvania 19406

PAC II

*For more information
about the PAC II
Project Management
System return the
attached card or
contact*

International Systems Inc.
890 Valley Forge Plaza
King of Prussia, Pa. 19406
(215) 265-1550



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

First Class Permit No. 107 Devon, PA 19333

POSTAGE WILL BE PAID BY ADDRESSEE

VERTEX SYSTEMS inc.

222 Lancaster Avenue
Devon, PA 19333



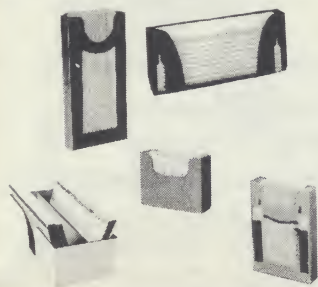
... The
**Magnetic Tape File
that Solves your Tax
Maintenance
Problems!**

VERTEX SYSTEMS inc.

222 Lancaster Ave.
Devon, PA. 19333
(215)-687-9060

BEEMAK Tabcard Holders

Since 1951 — BEEMAK
supplying holders for
all types of D.P. systems



Write for information.

BEEMAK PLASTICS

7424 Santa Monica Blvd.
Los Angeles, Cal. 90046, (213) 876-1770

BEEMAK TABCARD HOLDERS

Since 1951 — BEEMAK — supplying
holders for all types of D.P. systems



51 col.



80 col.



80 col.



96 col.



BP145



Racks made with any
holder in any design
or size.

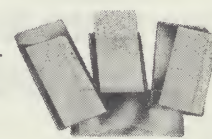
Holders with magnets or
adhesive strip. Spring clips
for attaching to shelves.

BP950

Unbreakable carrier.
Protects cards
traveling thru plant.
Visible, accessible.



Vinyl envelopes
available with adhe-
sive back or mag-
nets. Special sizes
made to fit your
needs.



RETURN THIS CARD FOR PRICES & CATALOG ON OUR COMPLETE LINE.

BEEMAK PLASTICS Phone (213) 876-1770

name _____ title _____

company _____

address _____

city _____ state _____ zip _____

*Is there a
better and
less expensive
way to clean
discs and
heads?*

Yes...

PREVENTIVE MAINTENANCE PROLONGS COMPUTER RELIABILITY

A small investment in computer performance can prevent
some complex and very costly problems.

SEND FOR FREE SAMPLES



TEXPADS.

A 91% Isopropyl Alcohol
pre-saturated pad for
cleaning magnetic discs
and tape heads without
affecting the
information stored.

☐ Send for free sample.



TEXSLEEVE & TEXWAND.

Specially sewn sleeve
made of lint-free cotton
will to clean discs and
recording heads. Used
with alcohol resistant
plastic Texwand.

☐ Send for free sample.

The TEXWIPE Co.
Hillsdale, New Jersey 07642

TURN OVER



Try CIMS for 30 days
without cost or
obligation.

Mail card today or call
(415) 938-2620.
BMS Computer, Inc.
P.O. Box 3086
Walnut Creek,
California 94598.

**Best buy for 303X, 370 & 360 users —
CIMS, a powerful job accounting/system
performance package you can afford.**

CIMS features complete
charge-back system, zero-
based budgeting, external
charges, cost control, and
much, much more.

Join our hundreds of happy
users. Rent your CIMS for
only \$110 a month, or buy at
low cost.

Mail this card today or call
(415) 938-2620.

Rush me what I've checked below —

☐ CIMS package on a no-cost, no-obligation,
30-day trial.

☐ Free brochure and actual sample reports.

MY OPERATING SYSTEM _____

NAME _____

TITLE _____

COMPANY _____

PHONE _____

STREET ADDRESS _____

CITY _____

STATE _____

ZIP _____

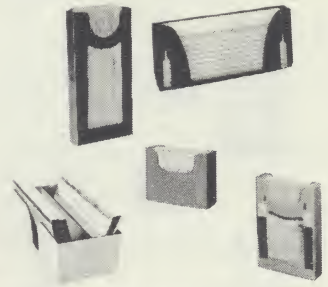
First Class
Permit No. 43790
Los Angeles
Calif. 90046

BUSINESS REPLY MAIL

No Postage Stamp Necessary if Mailed in the United States

BEEMAK PLASTICS
7424 Santa Monica Boulevard
Los Angeles, California, 90046

BEEMAK
Tabcard Holders
Since 1951 — BEEMAK
supplying holders for
all types of D.P. systems



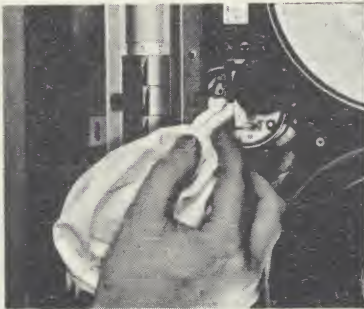
Write for information.

BEEMAK PLASTICS
7424 Santa Monica Blvd.
Los Angeles, Cal. 90046, (213) 876-1770

FREE EVALUATION SAMPLES

FOAM SWABS.
Totally lint-free urethane
foam swabs for cleaning
computer, audio and video
heads, data processing
equipment and small
critical electronic and
magnetic components.

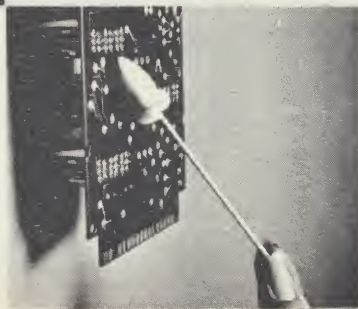
☐ Send for free sample.



☐ Send for complete catalog.

Texwipe
Cleaning Cloths.
Lint-free cloths for wiping
and cleaning magnetic tape
drives, relays, contacts,
and delicate electronic
components.

☐ Send for free samples



free **Texwipe**
catalog

Contamination Control
for
Computer Reliability



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY CARD

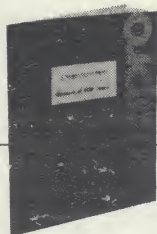
FIRST CLASS PERMIT NO. 850 WALNUT CREEK, CA.

POSTAGE WILL BE PAID BY ADDRESSEE

BMS Computer, Inc.
P.O. Box 3086
Walnut Creek, California 94598



CIMS — your best
buy in job accounting/
system performance
packages.



Check what \$12 can buy

Save time and money with these Datapro reports

Unbiased reports on the latest information processing products and methods. Specifications, prices, characteristics, user ratings, comparisons, selection guidelines, and more. • Minis
• Data Communications • Word Processing • Software • EDP Management • Office Copiers

minicomputers

1 All About 289 Small Business Computers

This comprehensive 70-page report is designed to help you select and apply low-cost business data processing systems. The characteristics and prices of 289 current systems from over 84 vendors are reported in detailed comparison charts. Selected from *Datapro 70*. Includes user ratings, \$12.

2 All About 251 Minicomputers

This comprehensive report is designed to aid you in understanding the rapidly proliferating minicomputers and selecting the one that can best satisfy your requirements. You'll find detailed comparison charts covering the characteristics of 251 current minicomputers from 74 manufacturers. Selected from *Datapro 70*. Includes user ratings, \$12.

3 All About 146 Microcomputers

This 37-page report features detailed comparison charts that describe characteristics and pricing of current microcomputers from 54 vendors, plus new information on development systems and kits. Selected from *Datapro Reports on Minicomputers*. \$12.

4 All About 109 Microprocessors

This completely revised, 28-page report details characteristics of 109 current microprocessors from 25 manufacturers. You'll also find straightforward guidelines to help you understand and apply these compact, low-cost CPU's. Selected from *Datapro Reports on Minicomputers*. \$12.

5 All About 227 Minicomputer Disk Storage Units

This 54-page report provides minicomputer users and suppliers with a comprehensive survey of 227 disk storage units. The comparison charts describe the current product lines of 37 suppliers, and the accompanying text offers the reader an enlightening guide for evaluating disk and drum storage performance. Selected from *Datapro Reports on Minicomputers*. \$12.

6 All About 104 Minicomputer Floppy Disk Storage Units

Floppy disk drives have emerged as a distinct type of peripheral device, with an identity and set of performance parameters entirely different from those of cartridge or pack drives. This 27-page report examines the floppy disk and puts its performance into perspective. 104 products from 28 vendors are detailed in accompanying comparison charts. Selected from *Datapro Reports on Minicomputers*. \$12.

7 All About 294 Minicomputer Printers

Until everyone can walk around with a vest-pocket display link to a computer data base, the printer remains the primary means for retaining information retrieved or generated by the computer. This 67-page survey looks at the products of 75 vendors in the form of comparison charts that detail the characteristics of 294 printers or printer families. Selected from *Datapro Reports on Minicomputers*. \$12.

8 How to Select and Install a Small Business Computer

The process of acquiring and implementing an effective business minicomputer does not have to be quite as mysterious as you've been led to believe. This 14-page report is designed to help facilitate the process by providing straightforward advice on justifying, selecting, manning, installing, and converting to a business minicomputer of your own. Selected from *Datapro EDP Solutions*. \$12.

data communications

9 All About 138 Batch/RJE Terminals

The path to high-volume transmission and reception of data at locations remote from your computer center is a confusing one. This 42-page comprehensive report provides detailed specifications of 138 remote batch terminals from 49 vendors, presents the results of an extensive user survey covering nearly 2,000 installed terminals, and offers practical guidelines for selecting a batch terminal that will meet your specific needs. Selected from *Datapro 70*. Includes user ratings, \$12.

10 All About Data Communications Facilities

This unique 32-page report summarizes the communications facilities and rate structures for interstate data transmission over the public telephone network, private lines, TWX/Telex, satellite channels, and packet switching networks. You'll also find the results of a survey of user experience with about over 12,000 communications links, plus guidance in selecting the facilities that will most effectively satisfy your needs. Selected from *Datapro 70*. Includes user ratings, \$12.

11 All About 261 Alphanumeric Display Terminals

This comprehensive 70-page report provides detailed specifications of 261 alphanumeric display terminals from 88 vendors, presents the results of an extensive user survey covering more than 20,000 installed terminals, and offers practical guidelines for selecting a display terminal that will meet your specific needs. Selected from *Datapro 70*. Includes user ratings, \$12.

12 All About 149 Teleprinter Terminals

This 38-page report provides detailed specifications of 149 teleprinter-style communications terminals from 53 vendors, presents the results of an extensive user survey covering more than 18,500 installed terminals, and provides guidance in selecting the most suitable terminals for your needs. Selected from *Datapro 70*. Includes user ratings, \$12.

13 All About 100 Time-Sharing and Remote Computing Services

This comprehensive 41-page report explains both interactive time-sharing and remote batch processing, discusses their advantages and drawbacks, summarizes the services offered by 100 remote computing companies, tells how users rate the leading companies, and provides guidelines for selecting suitable supplier and getting started. Selected from *Datapro 70*. Includes user ratings, \$12.

14 All About 300 Modems

Data communications users can select from an overwhelming variety of modems offered by dozens of independent vendors and by the telephone companies. This in-depth, 52-page report summarizes the characteristics of more than 300 current modems from 47 suppliers, provides useful selection guidance, and includes a unique survey of users' experience with over 11,000 modems. Selected from *Datapro 70*. Includes user ratings, \$12.

15 All About 71 Data Communications Multiplexers

This 27-page report explains the techniques and applications of multiplexing, summarizes the characteristics of 71 current units from 23 vendors, analyzes the experience of multiplexer users, and provides useful selection guidance. Selected from *Datapro 70*. Includes user ratings, \$12.

word processing

16 Word Processing Systems User Ratings

This report provides a detailed analysis of how over 1000 word processing users rated 75 makes and models of equipment, representing nearly 5000 standalone display, and shared logic word processors. Contains over 120 statistical and narrative entries for each system plus easy-to-use summary tables to let you analyze each system's performance point by point. Includes the 1978 Word Processing Honor Roll. Selected from *Datapro Reports on Word Processing*. \$12.

17 All About 100 Word Processors

This comprehensive 82-page survey summarizes the characteristics of over 100 models of automatic typing and text editing systems from 50 vendors. Detailed comparison charts describe each model's basic configuration, pricing, storage medium and capacity, editing features, printer characteristics and much more. Selected from *Datapro Reports on Office Systems*. Special Price: \$15.

18 Word Processing: Selected Magnetic Keyboards

Here's an in-depth examination of three contenders in this popular WP area: IBM Mag Card Typewriter, CPT Cassette 4200 Series, and Xerox 800 Electronic Typing Systems. 22 pages. Selected from *Datapro Reports on Office Systems*. \$12.

19 Word Processing: Selected Display Keyboards

Added flexibility is inherent in these four video-based product lines. Detailed analyses of Lanier Text Editors LTE-1 and LTE-2, Vydec 1146, 1200 and 1400 Word Processing Systems, IBM Office System 6 Information Processors, and Lexitron Videotype Text Processor Series. 31 pages. Selected from *Datapro Reports on Office Systems*. \$12.

20 Word Processing: Selected Shared Logic Systems

Large WP users will find a great deal of power and sophistication in these three minicomputer-based systems. Analyzed in depth are: Wordplex/1 and Wordplex/7, Xerox, VT III, and Wang Laboratories Word Processor. 21 pages. Selected from *Datapro Reports on Office Systems*. \$12.

21 Glossary of 263 Word Processing Terms

This glossary makes the often unfamiliar vocabulary of this rapidly emerging field understandable to the new or prospective word processing user, and explains many of the things word processing can and cannot do besides. Twelve pages include 263 definitions for terms used to describe the features and characteristics of modern word processing systems, as well as WP procedures and operations. Selected from *Datapro Reports on Word Processing*. \$12.

MORE

There are more time- and money-saving reports on the next page

See order card facing
next page at bottom

datapro

With these \$12 Datapro reports you can:

- Determine product performance, without buying, via published users' ratings
- Identify best price-performing products by direct comparison of specs and costs
- Eliminate costly mistakes resulting from improper product selection
- Control costs by improving the fit of products to your needs
- Outpace competition by increasing awareness of industry trends
- Identify new or growing markets
- Cost-optimize automated functions
- Save time screening vendors

software

22 User Ratings of Proprietary Software

This 20-page report contains the results of Datapro's most recent annual survey of proprietary software users, conducted in cooperation with *Datamation*. You'll find extensive tables showing how thousands of users rated 260 individual packages, plus financial insights and the newest Software Honor Roll. Selected from *Datapro 70*. Includes user ratings. \$12.

23 A Buyer's Guide to Data Base Management Systems

This 36-page report presents useful guidelines to aid you in preparing, evaluating and selecting a data base management system. It compares the key characteristics of major systems and provides an in-depth evaluation of these systems: ADABAS, IDMS, IMS, SYSTEM 2000, TOTAL, and DATACOM/DB. Selected from *Datapro 70*. \$12.

24 Software—Make or Buy?

The respective merits of building your applications software in-house, or of going to an outside vendor, have in the past few economically difficult years become more pressing than ever before. Making the wrong decision in this area can cost you tens of thousands of dollars. This eight-page report gives you guidelines to help you to decide whether to make or buy your next software package or system, and how to deal with vendors on a knowledgeable basis. Selected from *Datapro EDP Solutions*. \$12.

25 Leading Software Vendors Analyze Industry Trends

Where does the software industry stand today? Where is it going in the future? How should a user evaluate and select suitable software packages? These questions and more are addressed by top executives of most of the companies whose software products qualified for the Datapro Software Honor Roll. They share their opinions, experience and insight in this special, industry-oriented 15-page report. Selected from *Datapro EDP Solutions*. \$12.

26 Computer Performance Evaluation Tools: How to Select What's Right For You

This 10-page report describes what computer performance evaluation is, how it can help corporate and data processing management get more computer systems performance per dollar, and what hardware and software tools are available to facilitate computer resource management. Contains descriptions of the basic types of computer performance evaluation tools, including job accounting systems, hardware monitors, software monitors and others. Selected from *Datapro EDP Solutions*. \$12.

27 Directory of Users Groups and Trade Associations

This 22-page report contains information on 155 groups, and includes data on vendor- and product-oriented Users' Groups, EDP-oriented professional societies, and trade associations. Included are each group's headquarters address and phone number, objectives, number of members and membership requirements, plus more. From *Datapro EDP Solutions*. \$12.

28 How to Analyze Your Data Communications Needs

This nine-page report explains what data communications can do and how you can put it to work in your organization. You'll find straightforward procedures for determining your communications needs and implementing an effective system to satisfy them. Selected from *Datapro 70*. \$12.

EDP management

29 Management Concepts in Distributed Processing

Distributed processing, networking, source data automation—however you may know it—is changing the way the data processing function is being performed, and how data processing and corporate management must plan to meet future information needs. This report will help answer questions about how to integrate the shared processor concept into your data processing network, and will provide the necessary insights and overviews to prepare for the changes implied by the distributed concept. Selected from *Datapro EDP Solutions*. \$12.

30 Management Guidelines for Office Automation

Office automation is far more than just replacing typewriters with word processors. This 21-page report separates the automated office into five functional parts: Input, Process, Storage, Output, and Distribution. Each function is defined in simple, familiar terms; the new technologies are then introduced functionally to ease the transition from the familiar to the unfamiliar. Selected from *Datapro Automated Office Solutions*. \$12.

31 Glossary of 1300 EDP Terms

A handy reference to more than 1300 terms that are relevant either to data processing products and systems or to the management of data processing activities are clearly defined in this comprehensive 75-page glossary. The definitions reflect current usage, as well as conforming to "official" definitions published by ANSI, NBS and other recognized sources. Selected from *Datapro EDP Solutions*. Special Price: \$15.

32 How To Negotiate Computer Contracts

Unlike most EDP users, computer vendors negotiate contracts for a living, and vendor-prepared contracts are not pro-user documents. All too often they tend to obscure, disclaim, or limit what the vendor has led you to expect. This report will help you as a user, bring skill and equality to the negotiating table, and will help prevent mistakes, misunderstandings, and lost time and money. Selected from *Datapro EDP Solutions*. \$12.

33 Directory of 925 Suppliers

This 189-page directory contains informative profiles of 925 companies that offer EDP products and services of all types, plus guidelines for interpreting the information and selecting qualified suppliers. You'll find entries describing each company's location, size, executives, financial status, ownership, sales and service organization, and product line. Selected from *Datapro 70*. Special price: \$15.

34 User Ratings of General-Purpose Computer Systems

This eight-page report conveys the results of Datapro's latest survey of general-purpose computer users. Extensive tables summarize the experience of over 2200 computer system users. The users' ratings pinpoint the strengths and weaknesses of each mainframe manufacturer's equipment, software, and support. Selected from *Datapro 70*. Includes user ratings. \$12.

35 IBM System/370

This 80-page report describes and analyzes all of the System/370 equipment and software, including such recent developments as the model 3031, 3032 and 3033 processors, and summarizes the results of a survey of 767 System/370 users. Selected from *Datapro 70*. Includes user ratings. \$12.

office copiers

36 All About 200 Copiers

Here's a condensed one-for-one look at over 200 office copier models offered by 37 vendors that make up today's proliferating office copier market. In 70 pages you'll find concise text and extensive comparison charts to explain what's available today, and how it performs. Selected from *Datapro Reports on Office Systems*. Includes user ratings. \$12.

37 Selected Office Copiers: Low Volume

Detailed analyses of five major copiers intended for users needing 3,000 to 15,000 copies per month. All priced under \$5,000. Included are: Canon NP-50, Sharp SF-720, 3M Secretary II, Toshiba BD-601, and Savin 755. 16 pages. Selected from *Datapro Reports on Office Systems*. \$12.

38 Selected Office Copiers: Intermediate Volume

Detailed analyses of four major copiers selling under \$25,000. Suited for users needing 15,000 to 40,000 copies per month. Included are: IBM Copier II, Savin 770/780, Xerox 3400, and Canon NP-5500. 20 pages. Selected from *Datapro Reports on Office Systems*. \$12.

39 Selected Office Copiers: High Volume

Detailed analyses of three major copiers for those needing 40,000 to 60,000 copies per month. Prices start at about \$25,000. Included are: Eastman Kodak Ektaprint 100 and 150 Copier-Duplicator, IBM Series III Copier-Duplicator, and Xerox 9200/9400 Duplicators. 32 pages. Selected from *Datapro Reports on Office Systems*. \$12.

40 All About 56 Photocomposition Units

Once the exclusive domain of the commercial or newspaper printer, photocomposition is now entering the office environment via a number of relatively low-cost and easy-to-operate models. This 25-page report reviews 56 models of photocomposers from 14 manufacturers, ranging from smaller, keyboard-operated models to the very large, computer-controlled or tape-fed systems. Selected from *Datapro Reports on Office Systems*. \$12.

41 All About 262 Microform Readers and Terminals

This 82-page report summarizes the characteristics and features of 262 microform readers and reader/printers from 55 vendors, including hand-held, portable, desk, console, and automatic models. If you are considering the purchase of a microform system, or if you need to keep current about significant improvements in product design, this report is an essential aid. Selected from *Datapro Reports on Office Systems*. \$12.

TO ORDER
your selected
Datapro reports
USE THIS
CONVENIENT
CARD...

**You, Too, can make
history with
Cummins!** Write for free
case studies.

CUMMINS
CUMMINS-ALLISON CORP.

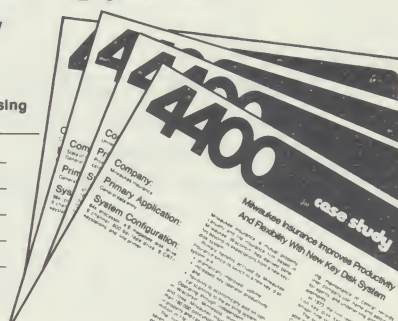
Cummins offers free case studies in distributed processing.

Find out how Cummins Key/disk and KeyScan® System users are improving productivity and efficiency while reducing operations and equipment costs.

- ☐ banking ☐ retail ☐ service ☐ government
☐ insurance ☐ manufacturing ☐ utility
 _____ check processing _____ general key entry
 _____ high-speed payment processing _____ reject re-entry
 _____ transaction balancing _____ tag printing & processing
 _____ batch balancing _____ other _____

Name _____
 Title _____
 Company _____
 City _____ State _____ Zip _____
 Telephone _____

CUMMINS
CUMMINS-ALLISON CORP.



when you buy
one
dozen

curtis young

ENDURA

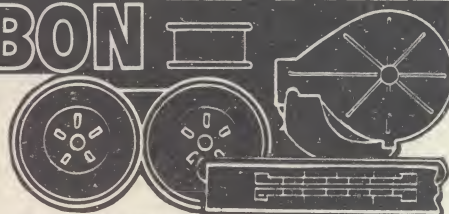
computer ribbons
you get one free...

FREE·FREE·FREE·FREE·FREE COMPUTER RIBBON

These are ribbons that are built to last. Try one, see for yourself how good they are: if you aren't thoroughly pleased...return the dozen for full credit. Order today: send your purchase order with this card.

Order the ribbon that fits your need now: if you don't see the model here, write or call 609-665-6650 for a prompt quotation. Orders shipped within 48 hours for rated firms.

Name _____
 Company _____
 Purchase Order # _____
 Address _____
 City _____ State _____ Zip _____
 Phone No. _____



Ultrasonically-welded Ribbons for IBM Systems

IBM 3784 (1/2" Harmonica)	Part #1136634	6.50 ea.
IBM 3776 (3/4" Harmonica)	1136670	9.75 ea.
IBM 3215 (Pork Chop)	1136970	4.85 ea.
IBM 3715 (Silver Dollar)	1136653	3.95 ea.

Long Lasting Ribbons for Popular Printers

Burroughs 321	17 1/2" x 50'	16.20 ea.
Centronics 101	1" x 36 yds.	3.95 ea.
Control Data 512	15" x 25 yds.	19.25 ea.
Data Products 2230	15" x 20 yds.	18.00 ea.
Digital Equipment		
LA 30/36	1/2" x 40 yds.	3.00 ea.
Honeywell 222	14" x 20 yds.	15.00 ea.
IBM 1403	14" x 20 yds.	15.00 ea.
IBM 3211	17" x 20 yds.	19.80 ea.
NCR 640/206	14" x 36 yds.	27.50 ea.
Univac 0770	15" x 55 yds.	39.60 ea.

Please check one: ☐ This is an order ☐ This is an inquiry

☒ Check what
\$12 can buy



**How
to
Order:**

To order your selection of reports described on the preceding two pages, simply check the corresponding report numbers on the adjacent prepaid order card, then complete, and mail the card.

I have selected the Datapro reports checked below:

1 2 3 4 5 6 7 8 9 10 11 12 13 14
 15 16 17 18 19 20 21 22 23 24 25 26 27 28
 29 30 31 32 33 34 35 36 37 38 39 40 41

Please enter my order for _____ reports at \$12 each.

_____ special reports at \$15 each.

☐ Enclosed is _____ ☐ Bill me for \$_____ adding \$2.00 handling charge.

Name _____
 Title _____ Phone _____
 Company _____
 Address _____
 City _____ State _____ Zip _____

datapro

BUSINESS REPLY CARD
FIRST CLASS Permit No. 319 Elk Grove Village, IL

POSTAGE WILL BE PAID BY

CUMMINS-ALLISON CORP.
Data Systems Division
2121 Landmeier Rd.
Elk Grove Village, IL 60007

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

CA CUMMINS
CUMMINS-ALLISON CORP.

**You, Too, can make
history with
Cummins!**
Write for free
case studies.

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 915 PENNSAUKEN, N.J.

POSTAGE WILL BE PAID BY ADDRESSEE

curtis young

2550 Haddonfield Rd. Box F
Pennsauken, N.J. 08110

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



when you buy
one dozen

ENDURA
computer ribbons
you get one free...



2550 Haddonfield Rd.,
Pennsauken, N.J. 08110

BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 178 DELRAN, N.J. 08075

POSTAGE WILL BE PAID BY ADDRESSEE

datapro

DATAPRO RESEARCH CORPORATION
1805 Underwood Boulevard
Delran, NJ 08075

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

**Datapro
Seminars**

Boost your performance by attending one of Datapro's highly respected management seminars. You'll gain new insights and a technical foundation that will serve you for months to come.

- Data Communications: An Introduction
- Data Communications: Advanced Concepts
- Data Communications: Network Design
- Data Base Management Systems
- Data Base Management Systems for Minis: A Comparative Analysis
- Word Processing: Guidelines for Planning
- Integration of Word Processing/EDP Systems
- Effective Computer Operations Management
- Computer Performance Measurement
- Data Processing: An Introduction to Concepts & Systems
- Distributed Systems: Are They Right for you?
- Minicomputer and Small Business Computers
- EDP Project Management: A Practical Approach

For schedules and course outlines fill in and return order card located elsewhere in this book or call toll-free:

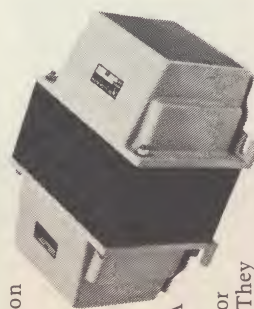
800-257-9406

In New Jersey, 609-764-0100

Or write:
Datapro Research Corporation
1805 Underwood Boulevard
Delran, NJ 08075

One HIT stops AC line noise.

An Elgar High Isolation Transformer (HIT) is the most economical solution to AC power line noise, attenuating input transients up to 146 dB. HITs are available in ratings from 1 KVA to 60 KVA. They can be wired for 120, 208, 240, or 480 VAC input or output. They are rated for either 50 or 60 Hz operation and are designed to UL specs. Hit us for complete information.



Name _____ Phone _____
 Title _____
 Company _____
 Address _____
 City _____ State _____ Zip _____

Software for the Total Job.

SAS gives you a total system for the total job.
 With SAS, you can get the data you need from any file, edit it, use extensive SAS tools for data management and file handling, analyze it statistically, and print your reports in any form you like.
 SAS handles tough jobs like SMF data reduction with ease. More and more users with data analysis needs are turning to SAS. Why not join them?
 SAS runs interactively under TSO or in batch mode on IBM 360/370s under OS or VS.

Name _____
 Company _____
 Address _____
 City _____ State _____ Zip _____
 Phone _____ Computer _____



SAS Institute Inc.
 P.O. Box 10066
 Raleigh, N.C. 27605
 919/834-4381

Honor Role Job Accounting and Utilization Supports

DOS • DOS/VS • POWER VS • MFT-MVT • VSI • SVS • MVS
 CICS • IMS • CMS • TSO
 BURROUGHS, HONEYWELL, UNIVAC, CDC, SIEMENS

NAME _____
 TITLE _____
 COMPANY _____
 ADDRESS _____
 CITY _____ STATE _____
 ZIP _____ PHONE () _____
 COMPUTER _____ OPERATING SYSTEM _____

COMPUT-A-CHARGE by VALUE COMPUTING



FIRST CLASS

Permit No. 47

Raleigh, N.C.

BUSINESS REPLY MAIL

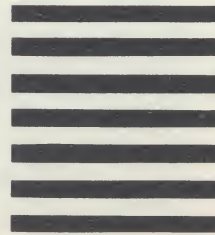
NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

Postage will be paid by:

SAS Institute Inc.

Post Office Box 10066

Raleigh, N.C. 27605



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

First Class Permit No. 222, Cherry Hill, N.J.

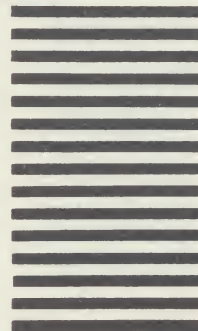
POSTAGE WILL BE PAID BY ADDRESSEE

Value Computing Inc.

300 VCI Building

W. Marlton Pike

Cherry Hill, N.J. 08002



FIRST CLASS
PERMIT NO. 5393
SAN DIEGO, CA

BUSINESS REPLY MAIL

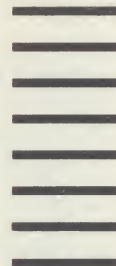
NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY:

ELGAR CORPORATION

8225 MERCURY CT.

SAN DIEGO, CA 92111



IS AN INPUT BOTTLENECK IN THE CARDS FOR YOU?

Write:
The Computer Software Company
6517 Everglades Drive,
Richmond, VA 23225,
804/276-9200



IS AN INPUT BOTTLENECK IN THE CARDS FOR YOU?

Data Entry Control System is an on-line entry and preparation system designed to replace both keypunches and off-line key entry systems with 3270 terminals. Available under DOS and DOS/VS, Data Entry Control System provides all data entry, verification and editing capabilities in less than 28K of memory. Highlights include:

- Support for keypunch, verification, and batch totals
- On-line training and prompting
- Browse capability
- Automatic recovery/restart
- Low memory requirement—28 to 30K
- Support for local and remote 3270 terminals
- New applications can be added in less than 30 minutes
- User subroutine

ON LINE DATA ENTRY.

THE COMPUTER SOFTWARE COMPANY

6517 EVERGLADES DRIVE, RICHMOND, VA 23225, TELEPHONE:
804/276-9200, TELEX: 82 83 94

Chicago . Cleveland . Dallas . Los Angeles . Minneapolis . Grenchen, Switzerland . Stockholm,
Sweden . Sydney, Australia . London, England . Mexico City, Mexico . Paris, France
PRODUCTS FOR PERFORMANCE

EDOS/VS ADVANCES DOS/VS

Write:
The Computer Software Company
6517 Everglades Drive,
Richmond, VA 23225,
804/276-9200

EDOS/VS AN IMPROVED OPERATING SYSTEM WITH ADVANCED CONCEPTS.

EDOS/VS means *EXTENDED* DISK OPERATING SYSTEM/VIRTUAL STORAGE. EDOS/VS is a series of optional enhancements to DOS/VS designed to improve the overall performance and operational characteristics of DOS/VS.

EDOS/VS is based on DOS/VS, but provides many of the functions of OS/VS1 without conversion effort or hardware upgrade.

Some of the exciting features include:

- 12-PARTITION SUPPORT
- VARIABLE PARTITION SUPPORT
- EXTENDED OPERATOR CONSOLE SUPPORT
- EXTENDED PROCEDURE LIBRARY SYSTEM
- PARTITIONED DATA SET SUPPORT

Isn't it time you looked at your software to improve your hardware performance.

THE COMPUTER SOFTWARE COMPANY

6517 EVERGLADES DRIVE, RICHMOND, VA 23225, TELEPHONE:
804/276-9200, TELEX: 82 83 94

Chicago . Cleveland . Dallas . Los Angeles . Minneapolis . Grenchen, Switzerland . Stockholm,
Sweden . Sydney, Australia . London, England . Mexico City, Mexico . Paris, France
PRODUCTS FOR PERFORMANCE

IS A CONSOLE BOTTLENECK KEEPING YOU FROM GETTING THE MESSAGE?

Write:
The Computer Software Company
6517 Everglades Drive,
Richmond, VA 23225,
804/276-9200



IS A CONSOLE BOTTLENECK KEEPING YOU FROM GETTING THE MESSAGE?

EXTENDED OPERATOR CONSOLE SUPPORT provides users of DOS, DOS/VS, EDOS, and EDOS/VS with console management capabilities never before available even in the video screen add-on packages in the market today.

- Features such as:
- 1052/3210/3215/3270 SUPPORT
 - MULTIPLE OUTSTANDING CONSOLE READS
 - CONSOLE SPOOLING SUPPORT
 - MESSAGE ROUTING FACILITY
 - PROGRAMMABLE FUNCTION KEYS
 - MESSAGE PRE-ANSWER CAPABILITY
 - END-OF-JOB LOGGING
 - SYSTEM STATUS DISPLAYS
 - FORWARD/BACKWARD PAGING

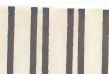
EXTENDED OPERATOR CONSOLE SUPPORT requires no changes in a user's host supervisor or application programs. It does not require a partition. Memory requirements are from 8K to 16K of real memory, depending upon selected options.

THE COMPUTER SOFTWARE COMPANY

6517 EVERGLADES DRIVE, RICHMOND, VA 23225, TELEPHONE:
804/276-9200, TELEX: 82 83 94

Chicago . Cleveland . Dallas . Los Angeles . Minneapolis . Grenchen, Switzerland . Stockholm,
Sweden . Sydney, Australia . London, England . Mexico City, Mexico . Paris, France
PRODUCTS FOR PERFORMANCE

Name _____
Title _____
Company _____
Address _____
City _____ State _____ Zip _____
Telephone _____ Ext. _____



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 4989 RICHMOND, VIRGINIA

POSTAGE WILL BE PAID BY ADDRESSEE

THE COMPUTER SOFTWARE COMPANY
6517 EVERGLADES DRIVE
RICHMOND, VA 23225

**IS A BOTTLENECK
IN THE
CARDS FOR
YOU?**

Write:
The Computer Software Company
6517 Everglades Drive,
Richmond, VA 23225,
804/276-9200

Name _____
Title _____
Company _____
Address _____
City _____ State _____ Zip _____
Telephone _____ Ext. _____



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 4989 RICHMOND, VIRGINIA

POSTAGE WILL BE PAID BY ADDRESSEE

THE COMPUTER SOFTWARE COMPANY
6517 EVERGLADES DRIVE
RICHMOND, VA 23225

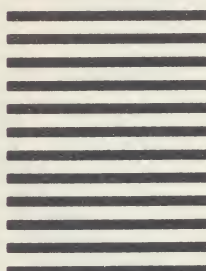
**EDOS/VS
ADVANCES
DOS/VS**

Write:
The Computer Software Company
6517 Everglades Drive,
Richmond, VA 23225,
804/276-9200

Name _____
Title _____
Company _____
Address _____
City _____ State _____ Zip _____
Telephone _____ Ext. _____



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 4989 RICHMOND, VIRGINIA

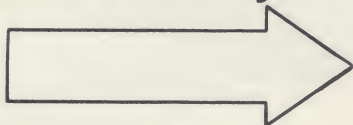
POSTAGE WILL BE PAID BY ADDRESSEE

THE COMPUTER SOFTWARE COMPANY
6517 EVERGLADES DRIVE
RICHMOND, VA 23225

**IS A CONSOLE
BOTTLENECK
KEEPING YOU
FROM GETTING
THE MESSAGE?**

Write:
The Computer Software Company
6517 Everglades Drive,
Richmond, VA 23225,
804/276-9200

Send for free
catalog on
preventive
maintenance
for computer
reliability



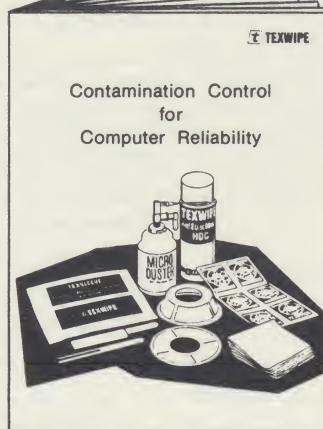
From
the
Computer
Professionals'
Book Club

—Bargains
you can't
afford
to miss!

Page 7

FREE!

The NEW Comprehensive 1978/1979 Texwipe Catalog



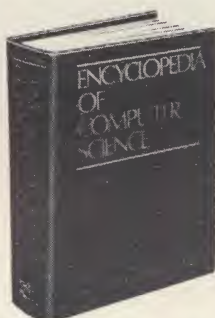
TEXWIPE • HILLSDALE, N.J. 07642

CONTAMINATION CONTROL for
COMPUTER ENVIRONMENTS

Whatever your contamination problems, Texwipe has the answer....lint-free wipers and swabs, cleaning kits, selective solvents, pre-saturated pads, anti-static products as well as inspection and cleaning equipment for disc packs and cartridges. All products and applications described in this new catalog.

SEND FOR YOUR FREE CATALOG TODAY.

Name _____ Title _____
Company _____ Address _____
City _____ State _____
Zip _____ CW _____



Publisher's price \$60.00
Club price \$39.95

Encyclopedia of
Computer Science

Edited by Anthony Ralston
and C. L. Meek
1,500 pages, 600 illustrations,
100 charts outsized 7 x 10 format.
Book no. 769/01X

\$60 value for \$3.95

OR take any one of these other outstanding professional books for only \$1.89 (values up to \$23.95) plus your first selection as a new member of the Computer Professionals' Book Club.

785/058 Micro-Analysis of Computer System Performance by B. Beizer; Pub. Pr., \$22.50; Club Pr., \$17.25

785/49X Programming for Minicomputers by J. C. Cluley; Pub. Pr., \$17.50; Club Pr., \$13.50

770/115 A Discipline of Programming by E. W. Dijkstra; Pub. Pr., \$19.95; Club Pr., \$15.75

785/074 The Structure of Computers and Computations by D. L. Kuck; Pub. Pr., \$23.95; Club Pr., \$18.95

333/874 Microprogramming Primer by H. Katzan, Jr.; Pub. Pr., \$20.95; Club Pr., \$15.70

785/538 The Codasyl Approach To Data Base Management by T. W. Olle; Pub. Pr., \$21.95; Club Pr., \$16.95

785/309 I/O Design: Data Management in Operating Systems by D. E. Freeman & O. R. Perry; Pub. Pr., \$17.50; Club Pr., \$13.95

654/158 Programming Languages by A. B. Tucker, Jr.; Pub. Pr., \$19.95; Club Pr., \$14.95

See other side of this card for details of Club membership

MAIL THIS CARD TODAY

Computer Professionals' Book Club
P.O. Box 582, Hightstown, NJ 08520

Please enroll me as a member of the Computer Professionals' Book Club and send me the two books indicated below. I am to receive my bonus of the Encyclopedia of Computer Science for just \$3.95, or any other book for \$1.89, and my first selection at the special Club price shown. These books are to be shipped on approval, and I may return them both without cost or further obligation. If I decide to keep the books, I agree to purchase as few as four books during the next two years at special club prices, guaranteed to be 15% below list. A postage and handling charge is added to each shipment. Orders from outside the continental U.S. must be prepaid.

Write Code No. of
bonus book here

Write Code No. of
first selection here

Charge my ☐ VISA ☐ MASTER CHARGE* Exp. Date _____

Credit Card # _____ *MC bank # _____ Signature _____

Name _____

Address _____

City _____ State _____ Zip _____

Computerworld Response Cards 1979

P39376

BUSINESS REPLY MAIL

NO POSTAGE STAMP NECESSARY IF MAILED IN UNITED STATES

Postage will be paid by:

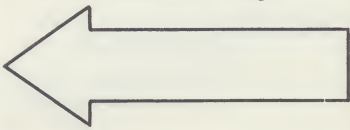
TEXWIPE

Post Office Box 278

Hillsdale, New Jersey 07642

FIRST CLASS
Permit No. 60
Hillsdale, N.J.

Send for free
catalog on
preventive
maintenance
for computer
reliability

**HOW THE CLUB OPERATES**

This is a professional club designed to meet your day-to-day data processing needs by providing practical books in your field at below publishers' prices. Basic to the club's service is the Book Club Bulletin which brings you news of books 13 times a year. Sent to members without cost, it describes the club's feature book as well as alternate selections available at special members' prices. When you want to examine the club's feature of the month, you do nothing. The book will be mailed to you as a regular part of your club service. If you prefer an alternate selection—or no book at all—you simply return the convenient card enclosed. As a club member you agree only to the purchase of 4 books over a 2-year period. Use the convenient card below to make your first selections.

You can't
afford
to miss
these
great

bargains

BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 42 HIGHTSTOWN, N.J. 08520

POSTAGE WILL BE PAID BY ADDRESSEE

**Computer Professionals'
Book Club**

P.O. Box 582

Hightstown, NJ 08520

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

from the
**Computer
Professionals'
Book Club**

WOLFE COMPUTER APTITUDE TESTING



P.O. Box 1104 St-Laurent Station
Montreal, Canada. H4L 4W6
(514) 337-4139

BENCHMARK REPORTS OF SMALL SYSTEMS:



BENCHMARKS OF SMALL SYSTEMS:

Issued one each month on another computer system in the \$15,000 to \$25,000 price range. Each report is 24 pages in length and includes the results of five standard benchmark tests, ease-of-use tests and user comments.

Reports in 1979:

- IBM 5110
- Datapoint 1170
- Wang 2200VP
- HP System 45
- DEC Datasystem 323
- Seven others
- Mid-year summary
- End-of-year summary

The only independently produced benchmarks of small systems available today.

(See Over)

COMPUTER TERMINALS DIRECTORY:



COMPUTER TERMINALS DIRECTORY:

Computer Terminals Directory with photographs, pricing information and full-page descriptions of 115 models. The most comprehensive and up-to-date guide available today.

Types of terminals included:

- IMPACT PRINTING
- THERMAL PRINTING
- VIDEO DISPLAY
- PRINTERS
- GRAPHICS
- REMOTE BATCH
- INTELLIGENT

Just published in soft cover edition for \$45 or included with full membership in the Association.

(See Over)

HIRING SYSTEMS ANALYSTS?

USE OUR PROVEN, VALIDATED TEST

SAAT—SYSTEMS ANALYSIS APTITUDE TEST

- Not a psychological test. Candidate designs actual working system.
- Good for all levels of experience
- Independent of computer language & hardware
- Given in your office, scored in ours in N.J.
- Predicts on-the-job success
- Outstanding value

OTHER TESTS FOR SYSTEMS & APPLICATIONS PROGRAMMERS

☐ Please send details Name _____ Title _____

☐ Please send 2 tests Company _____

P.O. No. _____ Address _____ Tel _____

or enclose \$270 City _____ State _____ Code _____

SMALL COMPUTER USERS

A new source of unbiased, user-oriented information about small computer systems

The non-profit Association of Small Computer Users (ASCU) provides members with the following publications, selected for their greatest value to current and prospective micro/mini users:

- **Interactive Computing**, bimonthly newsletter of ASCU and its affiliate, The Association of Time-Sharing Users. (Regular price, \$20; no cost to members.)
- The two **Datapoint Feature Reports**, "All About Small Business Computers" and "User Ratings of Minicomputers and Small Business Computers." (Regular price, \$12; no cost to members.)
- The **ICP Mini-Small Business Systems Software Directory**, the most comprehensive listing of software for small systems. (Regular price, \$65; member cost \$45.)
- The first issue of ASCU's **BENCHMARK REPORT** covering the IBM 5110. (Regular price, \$25; no cost to members.)

Association Membership

- ☐ Yes, I would like to join the Association of Small Computer Users. Membership Fee for 1979\$25
- ☐ I also wish to purchase the **ICP Mini-Small Business Systems Software Directory** at the reduced price for members\$45
- ☐ I also wish to subscribe to ASCU's **BENCHMARK REPORT**, including 12 comparisons of small systems to be issued in 1979. Member Price...\$150

Association of Small Computer Users

TIME-SHARING REPORTS

Complete, current directories designed to aid remote-computing users.

- ☐ Directory of 46 Financial Modeling Languages \$15
- ☐ Directory of 49 Interactive Data-Base Systems \$15
- ☐ Directory of 20 Remote Batch Services \$15
- ☐ Directory of 30 Interactive Graphics Programs \$15
- ☐ Directory of over 250 Data-Bases Available to Users \$15
- ☐ Directory of 21 Management Sciences Programs \$15
- ☐ Directory of 25 Interactive Accounting Systems \$15
- ☐ Directory of 54 Remote Computing Companies \$15
- ☐ Directory of Services Offered in 79 Geographic Areas \$15
- ☐ Directory of 39 Interactive Statistical Packages \$15
- ☐ Directory of 67 Engineering Programs \$15
- ☐ Directory of 33 Specialized Application Programs \$15
- ☐ Directory of 115 Computer Terminals \$45

Membership in ATSU

- ☐ Trial Membership in ATSU for 1979, including the Association's bi-monthly newsletter, "Interactive Computing" \$20
- ☐ All Reports Listed Above, including three loose-leaf binders, Full Membership in ATSU for 1979, the bi-monthly newsletters, and two special reports:
- Cost-Comparison Analysis of Remote Computing Companies
 - Cost-Comparison Analysis of Financial Modeling Systems\$85

The Association of Time-Sharing Users

PLACE
STAMP
HERE

Wolfe Computer Aptitude Testing
Box 1104, St. Laurent Station
Montreal, Canada H4L4W6

**WOLFE
COMPUTER
APTITUDE
TESTING**



**P.O. Box 1104 St-Laurent Station
Montreal, Canada. H4L 4W6
(514) 337-4139**

Name, Title _____
 Company _____
 Address _____
 City, State, Zip _____
 Telephone () _____

- ☐ Check enclosed for items indicated on reverse side.
- ☐ Please bill me, adding \$3 handling. (Application will be processed immediately upon receipt of remittance.)

PLACE
STAMP
HERE

Sample Page from
ASCU's **BENCHMARK REPORT:**

BENCHMARK REPORT

SYSTEM: IBM 5110
PRICE AS TESTED: \$19,975

SPEED TESTS		TOTAL TIME min.
CPU INTENSIVE		
A-1	N = 500	21.42
A-2	N = 1000	42.7
A-3	N = 2000	113.4
A-4	N = 3000	206.7
IO INTENSIVE		
B-1	N = 500	21.42
B-2	N = 1000	27.57
B-3	N = 2000	53.64
B-4	N = 3000	81.86
"REAL LIFE" PROBLEMS		
Basic System		TOTAL TIME min.
C-1	SCIENTIFIC/ENGINEERING	29.47
C-2	NEW PROJECT PLANNING	47.2
C-3	ACCOUNTS RECEIVABLE	41.10
EASE OF USE TEST		
Performance		
E-1	NUMBER OF KEYSTROKES REQUIRED	200
E-2	SUBJECTIVE DIFFICULTY	Very Easy
MIN. LIMITATIONS		



ASSOCIATION OF SMALL COMPUTER USERS

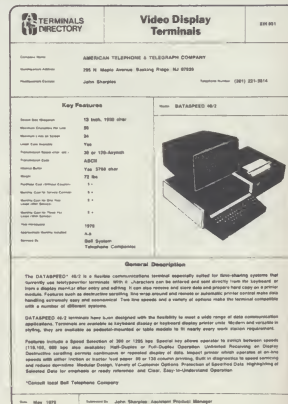
P.O. Box 9003, Boulder, CO 80301

Name, Title _____
Company _____
Address _____
City, State, Zip _____
Telephone () _____

- ☐ Check enclosed for items indicated on reverse side.
- ☐ Please bill me, adding \$3 handling. (Application will be processed immediately upon receipt of remittance.)

PLACE
STAMP
HERE

Sample Page from
ATSU's **TERMINALS DIRECTORY:**



The Association of Time-Sharing Users

P.O. Box 9003, Boulder, CO 80301

New from AUERBACH

Quality "how to" DP information at Economy prices....just \$7 each

- | | |
|--|--|
| ☐ Centralization: To Be or Not to Be (1-01-01)
☐ Approaches to DP Chargeback Systems (1-05-12)
☐ HIPO Structured Systems Design Documentation (4-01-05)
☐ General DP Job Descriptions (2-01-08)
☐ Salary Trends for DP Managers (1-04-07)
☐ Checklist for Security and Contin-
gency Planning (1-03-02)
☐ Buying and Selling Used Computer
Equipment (2-03-06)
☐ Evaluating Software Packages —
Part I (34-04-02)
☐ Evaluating Software Packages —
Part II (34-04-03)
☐ Computer Performance Evaluation
(52-20-08) | ☐ DBMS Performance Evaluation: Alternative Approaches (22-02-03)
☐ Developing User Schedules (43-01-02)
☐ Conducting User Interviews (32-02-02)
☐ User Participation in Systems Development (32-02-03)
☐ Systems Analysis Checklist (32-01-03)
☐ Systems Specification Checklist (33-01-03)
☐ Basic Principles of Data Commu-
nications Software (53-01-03)
☐ Understanding and Interpreting
Hardware Reliability and Avail-
ability (51-20-01)
☐ The EDP Auditor's Relationship
With DP Management (71-02-03)
☐ The Auditor and Data Communi-
cations Security (73-03-01) |
|--|--|

☐ Check enclosed, plus applicable state sales tax. ☐ Bill me

NAME/TITLE _____	
COMPANY _____	
ADDRESS _____	
CITY _____	STATE _____ ZIP _____
PHONE (Area Code) _____	
SIGNATURE _____	

CW379

AUERBACH Publishers Inc. is the foremost authoritative source of computer, data processing, data communications, and management reference materials in the world.



PROGRAMMERS ANALYSTS



A PIGEONHOLE IS NO PLACE FOR A PROGRAMMER/ANALYST

Find your future and a new creative freedom as a Consultant with
SOFTWARE DESIGN ASSOCIATES
Send for more information and
a FREE copy of our News'etter

Name _____	Title _____
Company _____	
Home Address _____	
City _____	State _____ Zip _____
Telephone _____	

Software Design Associates, Inc.

New York City • Farmington CT • Greenwich CT • Union N.J. • Phila PA • Chicago

For improved project control GET THE PICTURE...

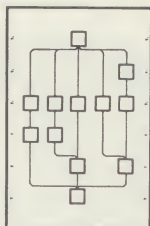
automatically with

E-Z-PERT®

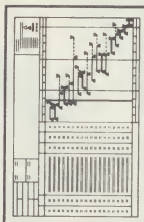
If you're using CPM/PERT as a project planning, scheduling and control tool, you should be using E-ZPERT too! It can save you time, money and improve your project control.

E-ZPERT is an automated project graphics system that operates on your computer and automatically transforms normal tabular output into the graphics you need—time scale networks, Gantt barcharts and cost/manpower graphs—produced on pen, film or electrostatic plotter.

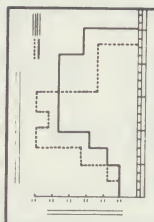
Get all the facts on how E-ZPERT can improve your project control... return this card today!



Time Scale Networks



Gantt Barcharts



Cost & Manpower Graphs



SYSTONETICS, INC.

CW-219

Name _____	Phone _____
Title _____	
Company _____	
Address _____	
City _____	State _____ Zip _____

The word's out...the picture's in.



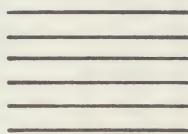
FIRST CLASS
PERMIT NO.
4021
ANAHEIM, CALIF.

Business Reply Card No postage stamp necessary if mailed in the United States

Postage will be paid by



SYSTONETICS Incorporated
600 N. Euclid Street
Anaheim, California 92801



DTM 9/78

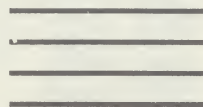
FIRST CLASS
Permit No. 5288
New York, N.Y.

BUSINESS REPLY MAIL

No Postage Stamp Necessary if Mailed in United States

— POSTAGE WILL BE PAID BY —

Software Design Associates, Inc.
260 Madison Avenue
New York, New York 10016



FIRST CLASS

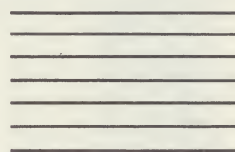
Permit No. 1169
Camden, NJ 08101

BUSINESS REPLY MAIL

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

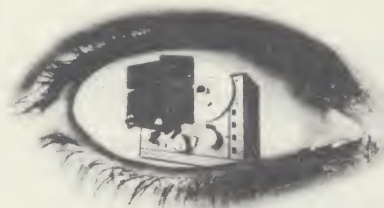
Postage will be paid by

AUERBACH Publishers Inc.
6560 North Park Drive
Pennsauken, NJ 08109



A closer look
at your tapes
saves
computer time.

Computer-Link
800-225-1616



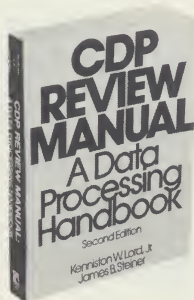
Introducing the only tape cleaner with an eye.

Now Computer-Link is offering the only dual tension tape cleaner with optical inspection for *continuous quality control*. It scans 100% of the tape's surface for nicks, scratches, or any physical damage. And it's under \$3300.

Call 800-225-1616 (in Massachusetts: 617-272-7400) for more detailed product information. Or write: 14 Cambridge St., Burlington, MA 01803.

Your Name _____ Title _____
Company Name _____ Bus. Phone _____
Address _____
City _____ State _____ ZIP _____

FREE 15-DAY EXAMINATION



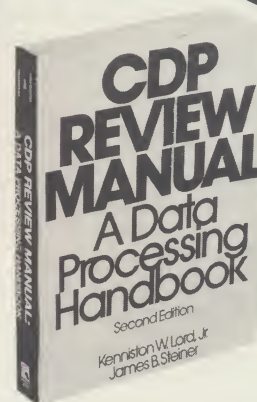
Expert help in preparing for the
CDP EXAM

You'll go to the CDP exam confidently with the help of this new manual!

NEW!

By Kenniston W. Lord Jr., CDP, & James B. Steiner, CDP. With the Second Edition of **CDP REVIEW MANUAL** you'll pass the exam with flying colors. Closely following the outline of the exam and geared to its latest revisions, this updated edition fully explains and illustrates today's concepts and business applications of EDP. You'll find a wealth of multiple choice questions such as those used on the exam . . . readily see why, where, when and how to apply today's methods and tools to DP management . . . and much more. If you're a CDP candidate . . . or preparing for other examinations involving DP skills . . . or otherwise seeking advanced positions requiring greater breadth of EDP knowledge, you'll want this vital information. It covers every facet of the data processing spectrum—all the skills you need to climb the EDP management ladder. 518 pp., illus., 8½ x 11, \$19.95 paper

Send for your 15-day FREE examination copy today!

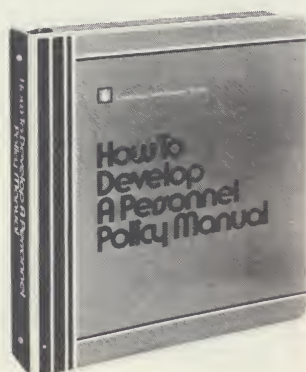


Name _____ Firm _____
Address _____
City _____ State _____ Zip _____

Offer good in U.S.A. only, and subject to credit department approval. Enclose payment with order and publisher pays postage and handling. Your local sales tax must be included with payment. Payment must accompany orders to P.O. box addresses.

80523-3

C 7480



Fill In & Mail
For Your 15-Day
Trial Copy!

Page 10

Makes preparing a policy manual easy! How To Develop A Personnel Policy Manual

468 pages • Illustrated • Checklists • Policies • 8½ x 11 Inch
3-Ring Binder • \$53.50 + postage and handling (returnable for full credit)

This new, 468-page timesaving guide helps you:
1) select those personnel practices and policies best suited to your company, 2) plan, prepare and produce an actual policy manual. You'll find hundreds of actual, ready-to-use policy statements to choose from and adapt to your particular needs. These policies cover virtually all phases of employee relations, such as: affirma-

tive action . . . hiring standards . . . wage and salary administration . . . maternity leave . . . hours of work and overtime . . . vacations, holidays, time off . . . promotion policies . . . plus much, much more. These policies leave nothing to chance and almost write your personnel policy manual for you. You receive over 50% more material in this new, expanded edition.

Company _____ Name _____
Address _____
City & State _____ Zip _____

CMW-279

Fill In And Mail For Your 15-Day FREE trial copy!

Place
Stamp
Here

COMPUTER-LINK CORPORATION
14 Cambridge Street
Burlington, MA 01803

**A closer look
at your tapes
saves
computer time.**

Computer-Link
800-225-1616

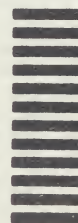


NO
POSTAGE STAMP
NECESSARY
IF MAILED IN THE
UNITED STATES

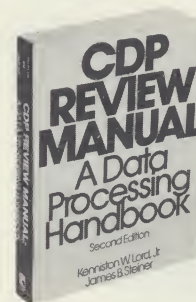
BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 19, FLORENCE, KENTUCKY

Postage will be paid by:

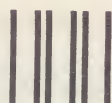
Van Nostrand Reinhold Company
7625 Empire Drive
Florence, Kentucky 41042



FREE
15-DAY EXAMINATION



Expert help in preparing for the
CDP EXAM



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

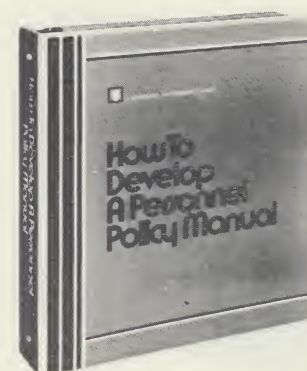
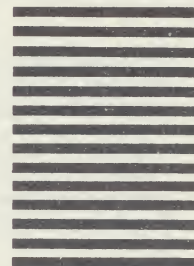
BUSINESS REPLY CARD

First Class Permit No. 545 Chicago, Illinois

POSTAGE WILL BE PAID BY ADDRESSEE

DARTNELL

4660 Ravenswood Avenue
Chicago, Illinois 60640



*Fill In & Mail
For Your 15-Day
Trial Copy!*

At last —
An OS
High-Speed
File Copier...

and compatible
with IEBGENER

Simplify File Copying

Plug-to-plug compatible
with IEBGENER

Get new levels of performance and value with COPYMACS™
MACS — Management And Computer Services, brings
sense to the file copying function with COPYMACS

- provides up to 60% reduction in CPU time and elapsed time
- generates comprehensive and meaningful messages and diagnostics
- offers functional capabilities beyond IEBGENER — initiate multiple copy functions in single step • copy input files to multiple output files • facilitate concatenation of non-compatible device type files

100% compatibility with IEBGENER enables you to gain COPYMACS' processing advantages without changing any existing JCL

Return this card before March 31, 1979, to request a FREE 15-day Trial Offer, and we'll allow a 20% discount — \$300 off the \$1500 purchase price of COPYMACS... or call 215/648/0730, and we'll start your Trial Offer even faster.

☐ I would like to take advantage of a free, no-obligation COPYMACS 15-day Trial Offer.

☐ Please contact me to provide more information.

Name _____

Title _____

Company _____

Address _____

City _____

State/Prov _____

ZIP/Postal _____

Phone _____

CPU Model _____

OS/Release _____

macs®
the datamacs people

CW029

GET THE FACTS ON DATA COMMUNICA- TIONS TESTING.

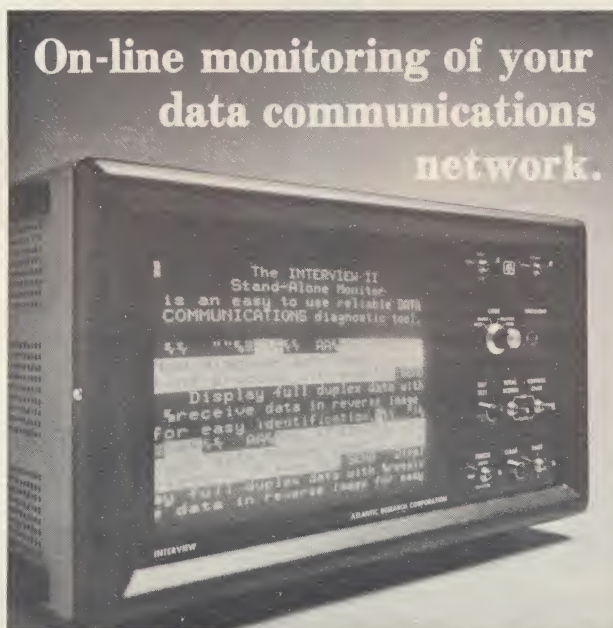
INTERVIEW II^{T.M.} Stand-Alone Monitor.

An easy to use,
reliable
data communications
diagnostic tool.



ATLANTIC RESEARCH CORPORATION
Teleproducts Division
5390 Cherokee Avenue
Alexandria, Virginia 22314
(703) 354-3400

On-line monitoring of your data communications network.



INTERVIEW II is a diagnostic instrument for monitoring and troubleshooting data communications networks.

Problems caused by hardware, software or line troubles are immediately visible, and less time is spent tracing problems because system operation is shown in full detail. Displaying the data being sent and received over the communication line. On-line, without disturbing your network. It finds troubles fast before the system fails.

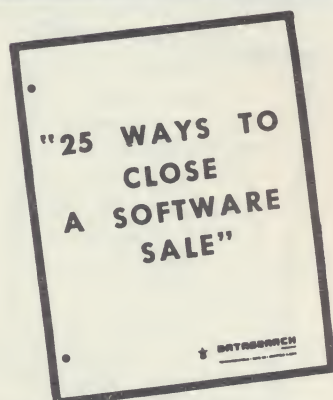
You get a full 9-inch, easy to read, 1024 character display. Unit stores 512 characters for later comparison. Or use an optional tape unit for bulk storage.

If you're concerned about your data communications network, you should investigate the benefits offered by the INTERVIEW II Stand-Alone Monitor.

For more information, return this card.

My application is _____

FREE REPORT



This timely writeup is yours FREE if your order is paid by check or credit card... If you use this report to its fullest, your sales figures could shoot up within weeks... Also, you'll save the \$3.25 postage and handling charges on all invoiced orders.

Page 11

YOUR OWN SOFTWARE PRODUCT HOW TO PACKAGE, MARKET AND MAKE IT GO!

The best selling document on software marketing ever published. Thousands of vendors and enterprising computer pros have benefited from its contents. Here's just part of it.

- 12 REASONS WHY SO MANY SOFTWARE HOUSES WIND UP IN THE "DEAD HEAP" - 2 CLASSIC CASES • 22 PROVEN WAYS TO REACH YOUR MARKETPLACE • MARKET RESEARCH - HOW TO TEST BEFORE YOU INVEST • THE MARKET HOTBEDS TODAY • THE BEST SOFTWARE ADS EVER WRITTEN • HOW USERS FEEL ABOUT SOFTWARE VENDORS AND WHAT IT TAKES TO MEASURE UP • SHOESTRINGING YOUR PACKAGE TO GREAT SUCCESS • MARKETING YOUR PACKAGE THROUGH A DISTRIBUTOR • HOW TO GET FINANCING - ARRANGE ROYALTIES, PATENTS, COPYRIGHTS AND MORE.

Whether you're an established vendor, a user with an investment to recoup, or an entrepreneur with a dream, you'll find the knowledge and fresh ideas in this guide worth far beyond its cost -- Order your copy now. Use it for thirty days. If not completely satisfied, return for full immediate refund.

Name/Company _____

Address/City/State/Zip _____

☐ Check Enclosed ☐ BankAmericard ☐ Mastercharge # _____

☐ Bill my company (add \$3.25 for postage & special handling)



• 9 x 12 Ring Binder
• 185 pp. • \$45.00

FIRST CLASS
PERMIT No. 39
VALLEY FORGE, PA. 19482

BUSINESS REPLY CARD

NO POSTAGE STAMP NECESSARY IF MAILED IN U.S.
POSTAGE WILL BE PAID BY:

macs management and computer services, inc.
great valley corporate center
valley forge, pa. 19482

Save
20%
on an
OS High-Speed
File Copier
See other side.

macs®
management and computer services, inc.
great valley corporate center
valley forge, pa 19482
215-648-0730

Name
Title
Company
Address
City
State
Zip



FIRST CLASS
PERMIT NO. 20
Alexandria, VA.

BUSINESS REPLY MAIL

No Postage Stamp Necessary If Mailed in the United States

POSTAGE WILL BE PAID BY

ATTN: TELEPRODUCTS MARKETING
**ATLANTIC RESEARCH
CORPORATION**
5390 CHEROKEE AVENUE
ALEXANDRIA, VIRGINIA 22314



3

GET THE FACTS ON DATA COMMUNICA- TIONS TESTING.

INTERVIEW II^{T.M.} Stand-Alone Monitor.

An easy to use,
reliable
data communications
diagnostic tool.



ATLANTIC RESEARCH CORPORATION
Teleproducts Division
5390 Cherokee Avenue
Alexandria, Virginia 22314
(703) 354-3400



First Class
Permit No. 259
MEMPHIS, TN

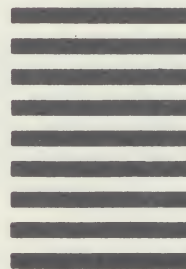
BUSINESS REPLY MAIL
no postage necessary if mailed in the United States

Postage will be paid by:

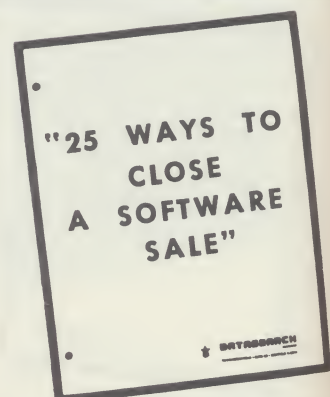
DATASEARCH

Incorporated

5694 SHELBY OAKS DRIVE • SUITE 105
MEMPHIS, TENNESSEE 38134



FREE REPORT



This timely writeup is yours FREE if your order is paid by check or credit card... If you use this report to its fullest, your sales figures could shoot up within weeks... Also, you'll save the \$3.25 postage and handling charges on all invoiced orders.

THE ICP SOFTWARE DIRECTORY

—Five Volumes—

—Published Twice Each Year—
—Over 5500 Software Products—

Data Processing Management — Over 1300 systems software products for medium and large scale computers.

Business Management — Cross Industry Applications — More than 900 applications products addressing the administrative, accounting and financial areas of any business using medium or large scale computers.

Business Management — Industry Specific Applications — Over 1400 software products for medium and large scale computers developed for use by a specific industry or business discipline. Such as Banking, Insurance, Manufacturing, etc.

Mini-Small Business Systems — Cross Industry — Over 1100 systems and general applications products written for mini and small scale computers, and used by any industry.

Mini-Small Business Systems — Industry Specific — More than 800 applications written for specific business disciplines using mini and small scale computers.

— 5500 SOFTWARE PRODUCTS —

— THE ICP SOFTWARE DIRECTORY —

— WORLD'S LARGEST SOURCE OF SOFTWARE PRODUCT INFORMATION —

— FIVE VOLUMES —

— EACH PUBLISHED TWICE YEARLY —
Three volumes covering medium and large scale computer software

1. **DATA PROCESSING MANAGEMENT**
2. **BUSINESS MANAGEMENT - CROSS INDUSTRY APPLICATIONS**
3. **BUSINESS MANAGEMENT - INDUSTRY SPECIFIC APPLICATIONS**

Two volumes covering mini/small scale computer software

1. **MINI-SMALL BUSINESS SYSTEMS - CROSS INDUSTRY**
2. **MINI-SMALL BUSINESS SYSTEMS - INDUSTRY SPECIFIC**

C6

— FIVE VOLUMES —
— SEND FOR A FREE BROCHURE —

☐ Have a representative call me

☐ Send literature

Name _____

Title _____

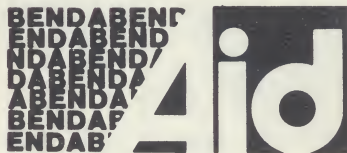
Company _____

Street _____

City _____ State _____ Zip _____

Tele: _____

*The only sensible
way to handle
abends.
Abend-Aid.*



Tomark

29433 SOUTHFIELD ROAD
SOUTHFIELD, MICHIGAN 48076

(313) 559-9050

**Why
do you think
they call it
a dump?**

dump/A dull, gloomy state of the mind, low spirits . . . A thick, ill shaped lump or hunk of anything . . . To deposit something in a heap or unshaped mass, as from a cart.
Webster

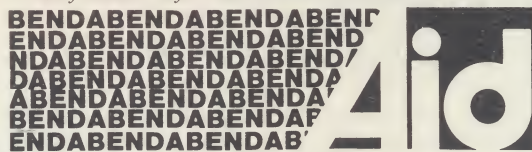
In today's sophisticated data processing environment the memory dump remains as an absurd anachronism.

- Abend-Aid is an operating system enhancement which will tell the user in English the exact cause of an abend.
- Abend-Aid will locate all the relevant data to fix the problem.
- Abend-Aid eliminates 95% of the tasks required in reading dumps.
- Abend-Aid has the intelligence to recognize various programming environments such as IMS, RACF, TMS etc.
- Abend-Aid will pay for itself in less than 6 months in most environments — large shops in less than 1 month.
- Abend-Aid is the only product ever offered which uses the power of the computer to analyze and debug abends.

Send today for complete information.

Name _____
Title _____
Company _____
City _____ State _____ Zip _____
Phone _____

The only sensible way to handle abends. Abend-Aid.



(313) 559-9050 • 29433 Southfield Rd., Southfield, Michigan 48076 Tomark

Now—a proven source for custom-designed terminals, peripherals, "black-boxes", etc. All application Engineered. Don't compromise! CUSTOM TERMINALS will build to your exact specifications—at low-cost, and in any quantities.—Products that will run reliably in your: • shop • secure areas • office • factory • mines • loading dock, • etc. All devices can be connected via our own special "concentroller" to a polled, multi-drop or contention network.



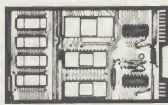
CUSTOM TERMINALS CORP.
A SUBSIDIARY OF COMPUTER HORIZONS CORP.

225 OSER AVENUE, HAUPPAUGE, N.Y. 11787 • (516) 231-3111

Page 12

LET CUSTOM TERMINALS CORP. POINT YOU TO THE SOLUTION.

optional
micro-based
local
intelligence



TR-10

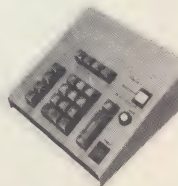


Low cost, reliable factory floor type data entry terminal . . . Available with badge readers, journal printers, customizable keyboards, and displays, etc.



TR/B

Special purpose multi display data entry terminal . . . Used with mini computerized conveyor systems, etc.



KB-8

Numeric Pad add-on for all peripherals and terminals. Interfaces with all CRT's and printers. (Customizable keyboards)

Name _____ Title _____ Company _____ Address _____ City _____ State _____ Zip _____



FIRST CLASS
Permit No. 9057
Indianapolis, Indiana

BUSINESS REPLY MAIL

no postage stamp necessary if mailed in the United States

Postage will be paid by

INTERNATIONAL COMPUTER PROGRAMS, INC.
9000 KEYSTONE CROSSING
INDIANAPOLIS, INDIANA 46240



**INTERESTED IN
PACKAGED
SOFTWARE?**

Did someone beat you to our card? You can still receive free information about the ICP Software Directories by writing to:

International Computer
Programs, Inc.
SIP Department
9000 Keystone Crossing
Indianapolis, IN 46240

Or call toll-free
800-428-2329



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

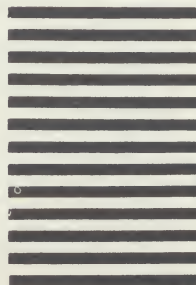
BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 149 SOUTHFIELD, MI 48076

POSTAGE WILL BE PAID BY ADDRESSEE

Tomark

29433 SOUTHFIELD ROAD
SOUTHFIELD, MICHIGAN 48076



*The only sensible
way to handle
abends.
Abend-Aid.*



Tomark

29433 SOUTHFIELD ROAD
SOUTHFIELD, MICHIGAN 48076

(313) 559-9050



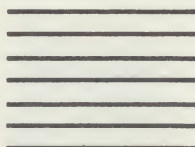
FIRST CLASS
Permit No. 529
Smithtown, N.Y.

BUSINESS REPLY MAIL

No Postage Necessary If Mailed in the United States

POSTAGE WILL BE PAID BY

Custom Terminals Corp.
225 Oser Avenue
Hauppauge, N.Y. 11787



Revised

IEEE Std 488-1978



Price: \$10.00

Standard Digital Interface for Programmable Instrumentation

Since its initial publication in 1975, IEEE Std 488 has played an ever increasing part in the design and operation of Instrumentation Interface Systems.

IEEE Std 488-1978 provides a standardized interface for programmable instrumentation. Utilizing a byte-serial bit parallel means to transfer data among a group of instruments and systems, the interface system is designed as an interdevice interface for system components in relatively close proximity able to communicate over a contiguous party-line bus system.

Users of simple as well as highly sophisticated systems of interconnected instruments can now readily combine products of different manufacturers into one system because of this new format which simplifies the digital data interfaces in instrumentation systems.

Compatible with CAMAC, modules in the CAMAC system have been designed to interface the IEEE Std 488 bus and are now commercially available.

While the technical concepts as defined in the original standard remain the same, changes have been incorporated into this revision of IEEE Std 488. A number of tables and figures have been modified, notes have been added to further explain conditions and provisions, and some specifications have been broadened. New and additional information has been provided for: system controller guidelines; devices powered off and on; serial poll; parallel poll configure; interface function capability identification; and, data rate consideration for high speed operation. Other changes have been made to provide clarification of potentially ambiguous statements.

Let AUERBACH custom design an Information Service to fit your needs!

I'm interested in acquiring a custom-designed Information Service addressing the following needs:

- | | | | |
|--|---|---|--|
| ☐ Mainframes | ☐ Systems Software Packages | ☐ Office-Related Systems | ☐ Managing a Datacomm Network |
| ☐ General Purpose Minis | ☐ Applications Software Packages | ☐ Time Sharing Services & Fees | ☐ Systems Development |
| ☐ Business Minis | ☐ Data Communications | ☐ Microform | ☐ Programming |
| ☐ Microprocessors | ☐ Point-of-Sale Systems | ☐ European & Japanese Systems | ☐ Data Base |
| ☐ Distributed Processing | ☐ Banking-Related Systems | ☐ Managing a DP Installation | ☐ Operations |
| ☐ Plug-Compatible Peripherals | | | ☐ EDP Auditing |
| ☐ Word Processing | | | |

☐ I'm not interested in any of the above at this time, but I'd like to be on your mailing list.



AUERBACH Publishers Inc. is the foremost authoritative source of computer, data processing, data communications, and management reference materials in the world.

Name/Title _____

Company _____

Address _____

City _____ State _____ Zip _____

Telephone (Area Code) _____

CW379

Free KroyType!™

SEE HOW IT TURNS OUT
INSTANT INPUT FORMS
AND OTHER DATA
PROCESSING NEEDS.



Want to add a new look of professional quality to your work?

Have some KroyType, our ingenious "type on tape" ideal for input forms, technical documentation, sales manuals, scheduling boards, charts, overhead transparencies, many other uses.

And KroyType can be produced quickly and easily by anyone on the Kroy Lettering Machine, a desktop unit weighing just 19 lbs. No training or chemicals needed. Dial the letter and press a button for clear, sharp, perfectly aligned characters.

**PHONE TOLL FREE 800-328-1306
OR COMPLETE FRONT OF CARD
AND MAIL TODAY.**

Prices start at \$350.

Order Form

IEEE Std 488-1978 Standard Digital Interface for Programmable Instrumentation
[SH07260] Price \$10.00

Mail Order with Payment to:

IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854

Enclosed is \$_____, Please send me _____ copies. Include \$2.00 shipping/handling charge with each order.

PCH

Name _____

Address _____

City _____ State _____ Zip _____



FIRST CLASS

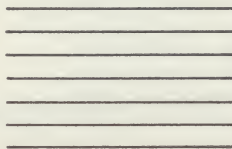
Permit No. 1169
Camden, NJ 08101

BUSINESS REPLY MAIL

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

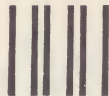
Postage will be paid by

AUERBACH Publishers Inc.
6560 North Park Drive
Pennsauken, NJ 08109



- ☐ Send me free KroyType sample and brochure.
☐ I'd like a no-obligation KroyType demonstration.

Name _____
Address _____
City _____
State _____ Zip _____



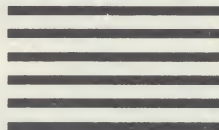
FIRST CLASS
PERMIT NO. 5673
ST. PAUL, MN

BUSINESS REPLY MAIL

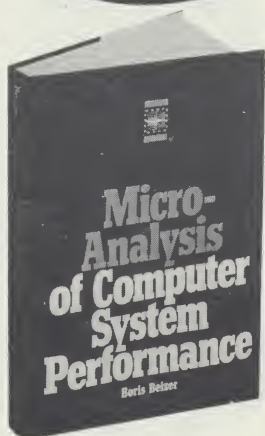
No postage stamp necessary if mailed in the United States

Postage will be paid by:

KROY INDUSTRIES INC.
GRAPHIC SYSTEMS DIVISION
1728 GERVAIS AVENUE
ST. PAUL, MN 55109



**EXAMINE
FREE**



For analyzing and improving computer-controlled systems

By Boris Beizer. **MICRO-ANALYSIS OF COMPUTER SYSTEM PERFORMANCE** shows how to design, test and construct models for analyzing system performance. It emphasizes analytical (e.g. algebraic) methods as opposed to simulation, and provides extensive coverage of cyclic systems as well as thorough information on tuning and design optimization techniques. You'll find signal flow graph techniques for program running time analysis, a convenient summary of queuing theory results, and much more. 420 pp., 177 illus., \$22.50

Send for your 15-day FREE examination copy today!

Name _____ Firm _____

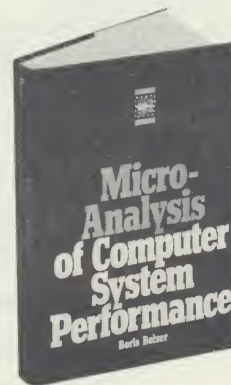
Address _____

City _____ State _____ Zip _____

Offer good in U.S.A. only, and subject to credit department approval. Enclose payment with order and publisher pays postage and handling. Your local sales tax must be included with payment. Payment must accompany orders to P.O. box addresses.

20663-1

C 7481



Moore's complete line of forms handling equipment solves your forms handling problems. Buy only the capacity you need, from single function portable models to sophisticated multi-function units. Start saving time and money today.

Write for a free brochure to:

Gene Tilley
Advertising & Public
Relations Manager
MOORE BUSINESS
FORMS, INC.
1205 N. Milwaukee Ave.
Glenview, Illinois 60025

**Unless your
forms handling is as fast
as your computer,
you're wasting
time and money.**



Moore's complete line of forms handling equipment solves your forms handling problems. Buy only the capacity you need, from single function portable models to sophisticated multi-function units. Start saving time and money today.

Send the reply card for a free brochure.

Name _____

Title _____

Company _____

Address _____

City _____ State _____ Zip _____

Phone _____

3-79



TALLY 1200 BAUD TELEPRINTER

**TALLY®
PRINTERS
WORLDWIDE**

Tally Corporation
8301 S. 180th St.
Kent, WA 98031
Phone (206) 251-5500



**TALLY®
PRINTERS
WORLDWIDE**

TALLY 1200 BAUD TELEPRINTER

Control 42 functions via the keyboard or the user program. Get valuable features like super print quality, 160 cps optimized bi-directional print speed, quiet operation, six selectable type fonts, u/l case, lk buffer, 300-9600 Baud operation, tabletop or pedestal mount, KSR or RO models. Send for our brochure.

Name _____

Title _____

Co. _____

Address _____

City/State _____

Phone _____



NO
POSTAGE STAMP
NECESSARY
IF MAILED IN THE
UNITED STATES

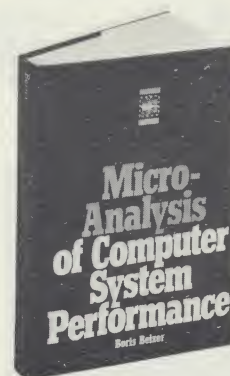
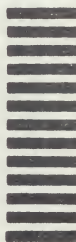
BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 19, FLORENCE, KENTUCKY

Postage will be paid by:

Van Nostrand Reinhold Company

7625 Empire Drive
Florence, Kentucky 41042



**EXAMINE
FREE**



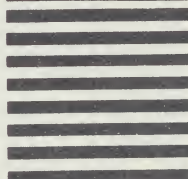
BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 117 GLENVIEW, IL

POSTAGE WILL BE PAID BY ADDRESSEE

Moore Business Forms, Inc.
1205 North Milwaukee Avenue
Glenview, Illinois 60025

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



Moore's complete line of forms handling equipment solves your forms handling problems. Buy only the capacity you need, from single function portable models to sophisticated multi-function units. Start saving time and money today.

Write for a free brochure to:

Gene Tilley
Advertising & Public
Relations Manager
MOORE BUSINESS
FORMS, INC.
1205 N. Milwaukee Ave.
Glenview, Illinois 60025

Attn: Gene Tilley, Advertising &
Public Relations Manager



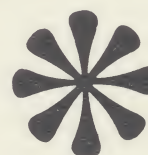
NO
POSTAGE
NECESSARY
IF MAILED
IN THE U.S.

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 115 KENT, WA

ATTN: MARKETING DEPT.

TALLY CORPORATION
8301 S. 180th St.
Kent, Washington 98031



**TALLY 1200 BAUD
TELEPRINTER**

**TALLY®
PRINTERS
WORLDWIDE**

Tally Corporation
8301 S. 180th St.
Kent, WA 98031
Phone (206) 251-5500

VuSet® Computer Terminal and Alphanumeric Keyboard.

FEATURES:

- ☐ Compact, economical, easy to operate
- ☐ Full alphanumeric input capability
- ☐ Switched network or private line operation
- ☐ Data entry capability of all 64 ASCII characters and 33 control characters. Terminal displays 64 or 128 ASCII characters
- ☐ Local telephone company installation, maintenance

VuSet® Alphanumeric Data Terminal

New Capability, Old Economy!

Full alphanumeric data entry capability is now available with Plantronics' economical VuSet data terminal and alphanumeric keyboard.

The system provides a low cost means to access and retrieve information stored in a computer. The VuSet is designed to increase efficiency and improve customer service in such businesses as banking, manufacturing, retailing, information services, insurance, medical and transportation.

☐ Send complete details. ☐ Have sales representative call.

Name _____ Title _____

Company _____ (AC) Telephone _____

Address _____

City/State/Zip _____

PLANTRONICS
Santa Cruz
(408) 426-5858



International Computer Negotiations, Inc. offers a wide variety of products and services, designed to help data processing users optimize their contractual negotiations in terms of time, money and protection.

SEMINARS

Third-Party Lease Negotiations — Three days of instruction on the hows and whys of third-party lease negotiations and contracting.
Computer Law — Three well-known lawyers each present a full day of instruction on a legal topic of vital importance to all organizations with a data processing department.

CNReport

A monthly information service containing practical negotiating tips, sample contract clauses and up-to-the-minute advice on financial contractual optimization. Case studies, contract administration guidelines and extensive checklists also appear.

VOLUME I

A compendium of 12 back issues of CNReport, including an index for easy reference to the answer to your computer negotiation questions.

TEST YOUR LEASING KNOW-HOW

Take this simple quiz and see if you are prepared to negotiate a lease which will protect your interests and get you the best deal on your next third-party equipment lease.

YES

NO

☐
☐

Do you know what precommencement rental days (PCRs) are?

☐
☐

Do you know how to avoid the "annuity switch" game?

☐
☐

Do you know how to "lock in" money and interest rates?

☐
☐

Do you know the criteria that should be used in selecting a third-party leasing company?

☐
☐

Do you know how to reduce your risk if the equipment fails?

☐
☐

Do you know the risk in a "walk-away" lease?

Turn the page to see how you rate as an equipment lease negotiator.

TEST YOURSELF

WORKSHOPS

In-house seminars, tailored to meet a particular client's acquisition needs. The material covers the basics of contract negotiation and legal protection in all types of acquisitions — hardware, software or services, lease, rental or purchase.

NEGOTIATIONS

Professional computer negotiators, highly trained and experienced in the art of negotiations, user-oriented computer contracting and optimizing financing provide on-site negotiation expertise. ICN's professional negotiators are "in the trenches" every day, negotiating with vendors. ICN's broad base of up-to-the-minute knowledge of the marketplace brings equality to the bargaining table.

GENERAL PROCUREMENT AGREEMENT

A user-oriented "master" agreement, evolved as a result of negotiations on behalf of more than a dozen major US firms. The price of the document includes a full day of consultancy by ICN to customize the agreement to individual situations.



First Class
Permit No. 1-733
Winter Park, FL

Business Reply Mail No postage stamp necessary if mailed in the United States

Postage will be paid by:

International Computer Negotiations, Inc.
1331 Palmetto Avenue
Winter Park, FL 32789



FIRST CLASS
Permit No. 674
Santa Cruz
California

BUSINESS REPLY MAIL

No Postage Necessary if Mailed in the United States

Postage will be paid by:

PLANTRONICS

345 Encinal Street
Santa Cruz, CA 95060

If this card is missing,
write or call
PLANTRONICS for in-
formation on the Alpha-
numeric VuSet—the most
compact, cost-effective
and flexible system avail-
able for data entry and
retrieval.

PLANTRONICS
Santa Cruz

345 Encinal St.
Santa Cruz, California 95060
(408) 426-5858

YOUR ANSWERS

If you answered "YES" to all six questions, you are either a professional lease negotiator or should be.

If you answered "NO" to even one of these questions, you could be "giving away" money every month or jeopardizing your organization.

International Computer Negotiations, Inc.'s **THIRD-PARTY LEASING HANDBOOK** can save you time and money, and assure you of adequate contractual protection, by putting substantive answers to these and many other questions at your fingertips.

The **THIRD-PARTY LEASING HANDBOOK** covers the ABCs of third-party leasing from lessor selection to lease agreement indemnification provisions. You'll find facts and information on various lessor "ploys," funny numbers games they play, tax considerations and "locking in" money and interest rates.

In addition to valuable leasing information, the **THIRD-PARTY LEASING HANDBOOK** contains an extensive checklist of over 180 items for consideration before you negotiate your next equipment lease. AND, ICN has also included a complete and actual 40-page third-party lease contract.

Order a **THIRD-PARTY LEASING HANDBOOK TODAY**, and \$39.95 will get you:

- information on the financial, legal and protection aspects of third-party lease contracts
- a comprehensive checklist for third-party leasing
- sample contractual clauses to protect your company against hidden costs, loopholes or obligations
- ICN's industry-proven baseline third-party lease contract — an actual lease which has been used successfully by major companies

Include your check with the order and save postage and handling costs.

Yes, I want to reserve my copy of ICN's **THIRD-PARTY LEASING HANDBOOK**, so that I will have access to the information I need to negotiate a lease which will give me maximum financial and contractual protection.

- ☐ Your offer sounds so good I've enclosed my check for \$39.95. ICN will pay for postage and handling.
- ☐ Send me my copy and bill my company for \$39.95, plus \$4 for postage and handling.

Name _____
Title _____
Company _____
Address _____
City _____
State _____
Zip _____
Signature _____

Please send me additional information on

- | | | |
|-----------------------------------|------------------------------------|---------------------------------------|
| ☐ CNReport | ☐ Seminars | ☐ Negotiations |
| ☐ Volume I | ☐ Workshops | ☐ GPA |



**International
Computer
Negotiations, Inc.**

1331 Palmetto Ave.
Winter Park, Fl. 32789
(305) 628-4640

GET 30% SAVINGS
WITH MEMOREX
LINE PRINTERS FOR
IBM, DEC AND
HP SYSTEMS.

MEMOREX

MEMOREX PRINTERS FOR IBM, DEC AND HP SYSTEMS AT 30% SAVINGS.

Increase your throughput and save with the Memorex® 600 and 1000 LPM printers compatible with DEC PDP-11 and HP 3000 systems; or choose our 400, 550, 750 and 1200 LPM models for your IBM System/3. Machines feature advanced chain-train technology for clear printing of 6 copies. Models are fully plug-compatible and buffered, allowing CPU processing between line settings. Immediate deliveries and full Memorex service backup. Attractive low-cost lease and purchase plans. For more printout with less payout, return postcard today.

I am interested in your _____ LPM printer(s), for my
☐ HP 3000 ☐ DEC PDP-11 ☐ System/3, Model _____

NAME _____ TITLE _____

COMPANY _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

© MEMOREX IS A REGISTERED TRADEMARK OF MEMOREX CORPORATION © 1979 MEMOREX CORPORATION



ORDER NOW! SOFTWARE INTERPRETERS FOR MICRO- COMPUTERS

By Thomas C. McIntire



\$18.95

Published by
JOHN WILEY & SONS, Inc.
P.O. Box 063
Somerset, N.J. 08873

**EXAMINE
FREE!**

*Learn How Source Language Interpreters Work
and How to Design One to Fit Your Needs*

SOFTWARE INTERPRETERS FOR MICROCOMPUTERS

By Thomas C. McIntire

Where most books on microprocessors are hardware oriented, this volume is devoted to software systems for microcomputers. It begins with an indepth analysis of the appropriateness of software interpreters. Design criteria and methodologies follow in tutorial form, explaining an approach for building interpreters. The final chapters are devoted to dissection of a

laboratory model, a BASIC language interpreter on an 8080 micro.

For the systems architect, the book offers the pros and cons for selecting the appropriate software architecture. For the software designer, the significance of different language attributes is described with considerations necessary for an interpreter-driven system.

(1978) \$18.95

-----For FREE Trial Copy, Mail This Card Today!-----

John Wiley & Sons, 605 Third Ave., New York, N.Y. 10016

Please send me this book to examine and use FREE for 15 days. If I keep it, I'll remit \$18.95 plus applicable sales tax and a small charge for postage and handling. Otherwise, I'll return it any time during the trial period and owe nothing. Offer good in USA only.

Your name must accompany order. Please print.

NAME _____

FIRM _____

STREET _____

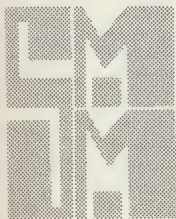
CITY/STATE/ZIP _____

063 P4225 0471-02678-6

SMM Presents

Volume Configurator

for DMS/OS



SMM Presents

Volume Configurator

for DMS/OS

As a selectable unit of the DMS/OS DASD Management System, the Volume Configurator brings new dimensions to space management.

For example, DASD users can now AUTOMATICALLY migrate both files and catalogues between like and unlike device types (including IBM 3850 Mass Storage). There is no need for preallocation and reblocking on target devices when migrating PO, PS and IS data sets.

With DMS/OS and the Volume Configurator installed: data management and movement is totally automated; management can reduce orders for new disk drives by efficiently using existing space; Mass Storage (IBM 3850) can go into production; programmers can be freed from clerical activities and tape libraries can begin shrinking.

If you're looking for ways to make your data center cost efficient, then find out what DMS/OS and the Volume Configurator can do for you. Send for our free documentation or give us a call (916) 441-7234.

Name, Title _____
Company _____
Address _____
City, State, Zip _____
Telephone _____

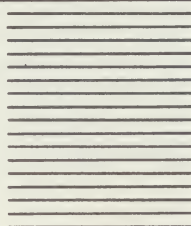


First Class
Permit No.
M2616
Santa Ana
Calif.

BUSINESS REPLY MAIL No Postage Stamp Necessary if Mailed in the United States

Postage Will Be Paid By

Memorex
Business Systems Division
3015 Daimler Street
Santa Ana, CA 92705



**GET 30% SAVINGS
WITH MEMOREX
LINE PRINTERS FOR
IBM, DEC AND
HP SYSTEMS.**

MEMOREX



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 2277 NEW YORK, N.Y.

POSTAGE WILL BE PAID BY ADDRESSEE

JOHN WILEY & SONS, Inc.
P.O. Box 063
Somerset, N.J. 08873



**ORDER NOW!
SOFTWARE
INTERPRETERS
FOR MICRO-
COMPUTERS**

By Thomas C. McIntire



\$18.95

Published by
JOHN WILEY & SONS, Inc.
P.O. Box 063
Somerset, N.J. 08873



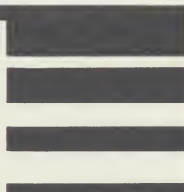
FIRST CLASS
PERMIT NO. 4518
SACRAMENTO
CALIFORNIA

BUSINESS REPLY CARD

No postage stamp necessary if mailed in the U.S.

postage will be paid by

Software Module Marketing
Crocker Bank Bldg./Penthouse
1007 Seventh Street
Sacramento, CA 95814



SMM Presents

**Volume
Configurator**
for DMS/OS

Software Module Marketing
Crocker Bank Bldg. / Penthouse
1007 Seventh Street
Sacramento, CA 95814
(916) 441-7234

IN?UIRY/ims

An On-Line fully-interactive Inquiry system for IMS data base/data communications environments. IN?UIRY/IMS operates through a natural language which is easily learned by non-technical personnel. IN?UIRY/IMS frees up valuable machine resources because less time is committed to the testing, debugging and compiling of special user requested programs.

Additionally, IN?UIRY/IMS allows data processing management to regulate the machine resources and limit data access to users through an internal security system that complements the IMS data base security system.

informatics inc

SOFTWARE PRODUCTS
ATT: JUDD BARTLING
21050 VANOWEN STREET
CANOGA PARK, CA 91304
(213) 887-9121

R_x

END YOUR IMS PAINS WITH IN?UIRY/ims

- EASILY EXTRACT DATA FROM IMS DATA BASES
- KEEP UP WITH USER DEMANDS
- CUT DEVELOPMENT OF ON-LINE APPLICATIONS BY 50%
- BRING END USERS BACK IN THE COMPANY

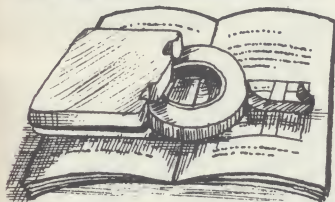
PLEASE SEND MORE INFORMATION ON IN?UIRY/IMS

NAME _____
TITLE _____
PHONE () _____ EXT. _____
COMPANY _____
STREET _____
CITY _____ STATE _____ ZIP _____

I HAVE THE FOLLOWING SYSTEM(S):

- ☐ IMS/DB/DC
☐ IMS/DB
☐ CICS/DLI

This is Your FREE DYL-AUDIT DEMO KIT:



It includes . . . a system tape, a demo guide, and **everything** else you need to do fast sample programs with DYL-AUDIT.

There is no better or more convenient way to see this new software system in action!

DYLAHOR
(213) 995-0151

NEW SOFTWARE SYSTEM FROM DYLAHOR!

Introducing DYL-AUDIT: A Completely Different Concept in EDP Auditing for 360/370 Computers

DYL-AUDIT is easy-to-use, yet embodies all the features that Auditors need. DYL-AUDIT utilizes the total power and versatility of the award-winning DYL-260 software package, but expands the system to include . . .

- Aging •Sampling •Frequency Distribution •Letter Writing
- Extraction and Selection Capabilities •Computations
- Totaling and Footing •Report Generation •All This and More . . .

. . . Plus an Easy to Install (portable) System.

Run this remarkable new system in your shop without cost or obligation.

- ☐ Send DYL-AUDIT Information
☐ Send the Free DYL-AUDIT Demo Kit (OS only; DOS to be released at a later date)
☐ Send more Facts about DYL-260

Name _____ Title _____
Company _____ Phone _____
Address _____
City _____ State _____ Zip _____
phone no. required for demo kit

Datapro Seminars

Boost your performance by attending one of Datapro's highly respected management seminars. You'll gain new insights and a technical foundation that will serve you for months to come.

- Data Communications: An Introduction
- Data Communications: Advanced Concepts
- Data Communications: Network Design
- Data Base Management Systems
- Data Base Management Systems for Minis: A Comparative Analysis
- Word Processing: Guidelines for Planning
- Integration of Word Processing/EDP Systems
- Effective Computer Operations Management
- Computer Performance Measurement
- Data Processing: An Introduction to Concepts & Systems
- Distributed Systems: Are They Right for you?
- Minicomputer and Small Business Computers
- EDP Project Management: A Practical Approach

For schedules and course outlines fill in and return order card located elsewhere in this book or call toll-free:

800-257-9406
In New Jersey, 609-764-0100

Or write:
Datapro Research Corporation
1805 Underwood Boulevard
Delran, NJ 08075

FREE seminar outlines and complete schedule

datapro

DATAPRO RESEARCH CORPORATION
1805 Underwood Boulevard
Delran, NJ 08075

- ☐ **Data Communications:** Introduction to Concepts & Systems
☐ **Data Communications:** Advanced Concepts and Systems
☐ **Data Communications:** Effective Network Design
☐ **Data Base Management Systems:** Concepts and Planning
☐ **Data Base Management Systems:** Comparative Analysis
☐ **Data Base Management Systems for Minis:**
A Comparative Analysis
☐ **Word Processing:** Guidelines for Planning, Design and Implementation
☐ **Integration of Word Processing EDP Systems**
☐ **Effective Computer Operations Management**
☐ **Computer Performance Measurement:** Tools & Techniques for Increased System Productivity
☐ **Data Processing:** An Introduction to Concepts & Systems
☐ **Distributed Systems:** Are They Right for You?
☐ **Minicomputer and Small Business Computers:** Selection & Usage Guidelines
☐ **EDP Project Management:** A Practical Approach

Since 1974 thousands of men and women representing nearly 900 organizations have attended Datapro's highly acclaimed series of two and three day information processing seminars. Sessions are held in New York, San Francisco, Washington, Chicago and other major cities.

call toll-free (In New Jersey, 609-764-0100)

800-257-9406

or return this card for free course outlines and schedule

Name _____

Title _____ Phone _____

Company _____

Address _____

City _____ State _____ Zip _____

BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 449 CANOGA PARK, CA

POSTAGE WILL BE PAID BY ADDRESSEE

informatics incSOFTWARE PRODUCTS
ATT: JUDD BARTLING
21050 VANOWEN STREET
CANOGA PARK, CA 91304

11-CP1-79

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATESRETAIN CONTROL OF COMPUTING
RESOURCES— GIVE USERS ACCESS
TO DATA WITH D.P. CONTROLEXTERNAL FILE CAPABILITY—
ALLOW THE USER TO CREATE
EXTERNAL OS DATA FILESCOMPUTATIONS— PERFORM
CALCULATIONS USING BUILT-IN
ARITHMETIC OPERATIONS OR
PRE-STORED FUNCTIONSNATURAL ENGLISH-LIKE
LANGUAGEPERFORMANCE INTEGRITY—
PRESERVE ALL IMS SECURITY
AND INTEGRITYOUTPUT— REAL TIME CRT
AND/OR HARDCOPYDATA BASE CAPABILITY—
MULTI-PATH DATA BASES, NON-
IMS RELATED DATA BASES**BUSINESS REPLY CARD**

FIRST CLASS PERMIT NO. 704 ENCINO, CA, U.S.A.

POSTAGE WILL BE PAID BY ADDRESSEE

**Dylakor Software Systems, Inc.**
16255 Ventura Boulevard, Suite 808
Encino, California 91436NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES**NEW SOFTWARE
SYSTEM FROM
DYLAKOR!**
Introducing DYL-AUDIT:
A Completely Different
Concept in EDP Auditing
for 360/370 Computers
Run this remarkable
new system in your shop
without cost or obligation.
DYLAKOR
(213) 995-0151**BUSINESS REPLY CARD**

FIRST CLASS PERMIT NO. 178 DELRAN, N.J. 08075

POSTAGE WILL BE PAID BY ADDRESSEE

dataproDATAPRO RESEARCH CORPORATION
1805 Underwood Boulevard
Delran, NJ 08075NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES**Datapro
Seminars**Boost your performance by attending one of Datapro's
highly respected management seminars. You'll gain
new insights and a technical foundation that will serve
you for months to come.

- Data Communications: An Introduction
- Data Communications: Advanced Concepts
- Data Communications: Network Design
- Data Base Management Systems
- Data Base Management Systems for Minis: A Comparative Analysis
- Word Processing: Guidelines for Planning
- Integration of Word Processing/EDP Systems
- Effective Computer Operations Management
- Computer Performance Measurement
- Data Processing: An Introduction to Concepts & Systems
- Distributed Systems: Are They Right for you?
- Minicomputer and Small Business Computers
- EDP Project Management: A Practical Approach

For schedules and course outlines fill in and return
order card located elsewhere in this book or call toll-
free:**800-257-9406**

In New Jersey, 609-764-0100

Or write:
Datapro Research Corporation
1805 Underwood Boulevard
Delran, NJ 08075

Now — Cost-Effective EDP Decision-Making Made Easy!

INTRODUCING . . .

20 top-notch AUERBACH technology reports covering every major EDP topic from small business systems to time sharing.

Just \$10 each!

- | | |
|---|--|
| ☐ Small Business Computer Systems (140.0000.200) | ☐ Payroll (405.0000.100) |
| ☐ General-Purpose Minicomputers (180.0000.200) | ☐ Accounts Receivable (406.0000.100) |
| ☐ High-Speed Printers (210.0000.100) | ☐ Accounts Payable (407.0000.100) |
| ☐ Compatible Memories (220.0000.100) | ☐ General Ledger (408.0000.100) |
| ☐ IBM and IBM-Compatible Mainframes (100.0000.010) | ☐ Inventory Control (413.0000.100) |
| ☐ Plug-Compatible Disc Systems (235.0000.100) | ☐ Data Base Management Systems (620.0000.202) |
| ☐ Optical Character Recognition (280.0000.200) | ☐ Data Communications Facilities (710.0000.200) |
| ☐ Banking Terminals (298.0000.200) | ☐ Modems (725.0000.200) |
| ☐ Word Processing (304.0000.200) | ☐ Alphabetic Display Terminals (760.0000.200) |
| | ☐ Remote Batch Terminals (765.0000.200) |
| | ☐ Time Sharing (952.0000.200) |

☐ Check enclosed, plus applicable state sales tax. ☐ Bill me

NAME/TITLE

COMPANY

ADDRESS

CITY

STATE

ZIP

PHONE (Area Code)

SIGNATURE

CW379



AUERBACH Publishers Inc. is the foremost authoritative source of computer, data processing, data communications, and management reference materials in the world.

INVERTERS? FREQUENCY CHANGERS?

WE'VE GOT THEM IN STOCK! THEY'RE SINE WAVE.

HAVE A UNIQUE APPLICATION?

WE'VE PROBABLY SOLVED IT FOR SOMEONE ELSE ALREADY!

Over 300 models from 125 VA to 10 KVA

Input Ranges: 11 to 350 VDC

Output: 115, 220, 240 VAC — 50, 60, 400 Hz

LOOK to NOVA, THE INVERTER PEOPLE, for the latest in power conversion technology, performance, innovation and service.

Government Agencies: GS-00S-30645

Entire catalog on GSA Schedule

- ☐ Send me your catalog.
☐ Have a salesman call.
☐ Thank God I found you. I have an application.
CALL ME!

Name Title

Company

Address

City State Zip

Tel. No. (.....) Ext.

NOVA ELECTRIC MFG. CO. • 263 Hillside Ave., Nutley, NJ 07110 • (201) 661-3434

**Our plotter plus your terminal:
they add up to fast graphics and color copies.**

NAME

COMPANY

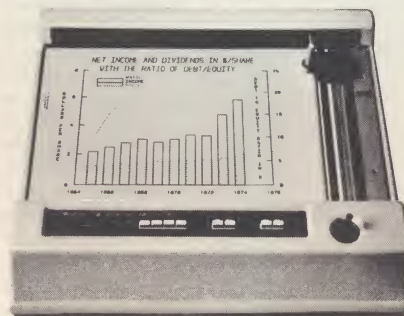
ADDRESS

CITY

ZIP

PHONE

Tektronix 4662 Interactive Digital Plotter produces sharp, clean 11"x15" copies in just seconds from what may now take hours of your people's time to hand-draw.



- ☐ Please send me information on the 4662 Interactive Digital Plotter.
☐ Please have a Sales Engineer call on me.
☐ Please add my name to your mail list.

My job application is:

I plan to purchase within: ☐ 3 mos.

☐ 6 mos.

☐ 9 mos.

Tektronix
COMMITTED TO EXCELLENCE



FIRST CLASS

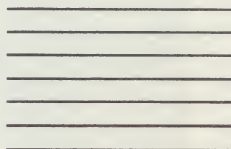
Permit No. 1169
Camden, NJ 08101

BUSINESS REPLY MAIL

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

Postage will be paid by

AUERBACH Publishers Inc.
6560 North Park Drive
Pennsauken, NJ 08109



BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 9092 NEWARK, N.J.

NOVA ELECTRIC MANUFACTURING CO.

263 Hillside Avenue

Nutley, N. J. 07110



First Class
Permit No. 61
Beaverton,
Oregon



BUSINESS REPLY

No postage stamp necessary if mailed in the United States

Postage paid by:

Tektronix, Inc.
Information Display Division
Delivery Station 60-715
P.O. Box 500
Beaverton, Oregon 97005

"I/O Solutions" from Electro Rent

Write or call for free brochure on purchasing, renting and leasing computer terminals.



4131 Vanowen Place
Burbank, CA 91505

800-423-2337 800-232-2173
(in California)

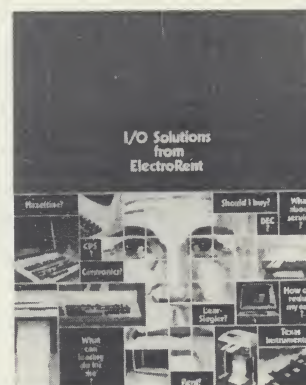
The TERMINAL SOLUTION

If you ever needed a CRT, keyboard or character printer, or acoustic coupler and have had to determine whether to purchase, rent or lease this equipment, the I/O Solutions handbook from Electro Rent can help make your next decision easier. This valuable brochure gives detailed cost information on acquiring terminals through the various methods and also lists dozens of different terminals by the leading manufacturers together with purchase costs, rental and lease rates.

Send this postage paid card for your free no obligation brochure or for a faster response call us toll free at 800-423-2337 or in California at 800-232-2173.

NAME/TITLE _____
COMPANY _____
TELEPHONE () _____
ADDRESS _____
CITY/STATE _____ ZIP _____

Also send ☐ Microcomputer Develop. Catalog ☐ General Catalog ☐ Have a Rep call



Q.E.D.—A GROWING FORCE IN EDP EDUCATION AND PUBLISHING

EDUCATION—Thousands of EDP professionals have participated in Q.E.D. courses over the last eight years. Topics include:

- Structured Design/Programming • Systems Analysis/Design • Data Base • Distributed Processing • Data Communications/On-Line Systems Design • Minicomputers • Project Management • User's Role in Systems Development • Quality Assurance • Computer Control and Audit

A. In-Plant: Q.E.D. develops materials and conducts courses for clients worldwide.

B. College Programs: Through our unique college based Electronic Data Processing Education Program (EDPEP), several thousand DP professionals have attended our courses. Join the program as sponsors and take advantage of the low membership price or send participants on a course basis.

C. Public Programs: Q.E.D. offers over 100 courses publicly in Boston, Mass. and Teaneck, New Jersey.

For schedules and course information, contact:

Q.E.D. Information Sciences, Inc.
141 Linden Street, P.O. Box 181
Wellesley, Mass. 02181
Tel: (617) 237-5656



Q.E.D. Information Sciences, Inc.
141 Linden Street, P.O. Box 181
Wellesley, Mass. 02181

DISCOUNTS FROM 20% TO 50% ON ALL Q.E.D. TECHNICAL BOOKS

Here's your chance to purchase any of Q.E.D.'s books at substantial savings.

Over 20 titles covering data base systems, distributed processing, minicomputers, intelligent terminals, IMS data base design, computer control and audit, data processing performance management, data dictionaries, data center disaster, transnational data regulation and COBOL techniques. These are current, in-depth and practical.

RETURN THIS CARD PROPERLY FILLED OUT, AND WE WILL SEND YOU A CATALOG AND SPECIAL ORDER FORM. DO IT NOW WHILE IT IS ON YOUR MIND.

NAME _____
TITLE _____
COMPANY _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
PHONE _____ CW

☐ Send information on Q.E.D. courses

This offer good until June 1979.

REDUCE
DATA
STORAGE
COSTS BY
60 - 80%
WITH

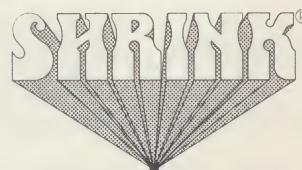


informatics inc

SOFTWARE PRODUCTS
ATT: TIM COREY
21050 VANOWEN STREET
CANOGA PARK, CA 91304
(213) 887-9121

Page 19

SHRINK/2



SHRINK/IMS

REDUCE DATA STORAGE COSTS BY 60 - 80%!

SHRINK FILE COMPRESSION/ENCRYPTION SYSTEMS ARE SAVING OUR USERS OVER

\$1 MILLION/MONTH

IMPLEMENT IN TWO HOURS!

TAILORED FOR TWO ENVIRONMENTS:

- SHRINK/2 -OS AND OS/VS •SHRINK/IMS -IMS/VS (FULL APPLICATION TRANSPARENCY)

I AM INTERESTED IN:

☐ 1 HOUR QUICK TEST

SEND ME MORE INFORMATION ON:

☐ SHRINK/2

☐ SHRINK/IMS

NAME _____
TITLE _____
PHONE () _____ EXT. _____
COMPANY _____
STREET _____
CITY _____
STATE _____ ZIP _____
COMPUTER _____ OPERATING SYSTEM _____



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

First Class Permit No. 2344, Burbank, CA

POSTAGE WILL BE PAID BY ADDRESSEE



4131 Vanowen Place
Burbank, CA 91505



"I/O Solutions" from Electro Rent

Write or call for free brochure
on purchasing, renting and
leasing computer terminals.



4131 Vanowen Place
Burbank, CA 91505

800-423-2337 800-232-2173
(in California)

PLACE
STAMP
HERE

Q.E.D. INFORMATION SCIENCES, INC.
P.O. BOX 181
141 LINDEN STREET
WELLESLEY, MASSACHUSETTS 02181

Q.E.D.—A GROWING FORCE IN EDP EDUCATION AND PUBLISHING

TECHNICAL PUBLISHING—Q.E.D.
offers many technical publications for
data processing professionals. These
books and reports are used by thou-
sands of professionals worldwide and
cover a variety of areas.

- EDP Performance Management
- Computer Control and Audit • Data Base • Distributed Processing • Data Dictionary Systems • Intelligent Terminals • TP Monitors • Data Center Disaster • IMS Data Base Design • EDP Quality Control

SELF-STUDY COURSES—Q.E.D. offers self-study courses for both data processing professionals and involved users. The courses cover both data processing disciplines as well as courses in leadership, human relations, writing, presentations, production management, and managerial accounting.



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 449 CANOGA PARK, CA

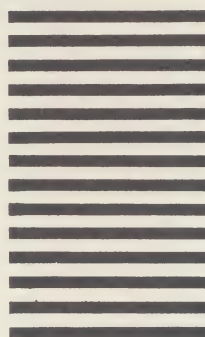
POSTAGE WILL BE PAID BY ADDRESSEE

informatics inc

SOFTWARE PRODUCTS
ATT: TIM COREY
21050 VANOWEN STREET
CANOGA PARK, CA 91304



S3-CP1-79



SHRINK[®]

**THE MOST POWERFUL FILE
COMPRESSION/ENCRYPTION
SYSTEM IN THE WORLD**

SHRINK/2 PROVIDES

- INCREASED DISK/TAPE SPACE BY 60-80%
- REDUCED INPUT/OUTPUT BOTTLENECK
- IMPROVED COMPUTER THROUGHPUT

SHRINK/IMS PROVIDES

- APPLICATION PROGRAM TRANSPARENCY
- OPTIMIZED DATA BASE BACK-UPS
- SELECTIVE SEGMENT COMPRESSION

informatics inc SOFTWARE PRODUCTS



**BUYING?
SELLING?
LEASING?
360 - 370
SYSTEMS
OPERATING
LEASES
1 YR. AND LONGER.
30XX, 370, CPU's
PERIPHERALS**

**ANTRON COMPUTER CORPORATION
CAN SAVE YOU MONEY**
If you are planning a change or would like to save money on your present configuration send us your requirements or call today 214-243-4061.

☐ I need/have _____

☐ Send more information.
☐ Add me to your mailing list.
Name _____
Title _____ Phone _____
Company _____
Address _____
City _____ State _____ Zip _____

**INKING ROLLS—
Just for Univac.**

**Day-Flo® Rollers, for your
Univac 1710, 1810 & DCT 500 Printers**

- **Cleaner, sharper print-out.** Less clean-up and downtime. Thousands more readable impressions.
- **No more "morning sickness."** Won't dry out over night. Ready to go first job each morning.
- **Performs at all temperatures...** 40° to 140° F. Not bothered by humidity changes either.

- **In black or premium purple.** Day-Flo purple outlasts other manufacturers' black.
- **Complete and mail this card for more information.**



Name _____ Title _____
Firm Name _____
Address _____
City _____ State _____ Zip _____

DAYCO
CORPORATION  **PRINTING PRODUCTS COMPANY**
DAYTON, OHIO 45401

**Rotomatic® doubles filing
capacity, saves space...**

**... converts overcrowded EDP filing areas to modern,
cost-effective Infocenters.**

Rotomatic replaces space-wasting open shelving and old-fashioned filing cabinets with compact, sleek, high volume units. Turns a crowded wall into an efficient, double-access Infocenter. Fast reference and refiling becomes easy ... rotary revolves 90° to 360° in either direction for instant dual access to either record bank. Pull out shelf provides work assembly area. Up to 8 tiers high, with adjustable shelves that take mag. tape reels, tape inventory records, scheduling folders ... or any combination.



Send now for **FREE** Rotomatic brochure.

Infocenters **ACME VISIBLE** **We Simplify.** Fill in mailing data on other side.

DTM 12/78

FIRST
CLASS
MAIL
PERMIT NO.
572
GARLAND,
TEXAS

BUSINESS REPLY MAIL — NO POSTAGE NECESSARY IF MAILED IN U.S.

POSTAGE WILL BE PAID BY:

ANTRON COMPUTER CORPORATION

P.O. BOX 401064
GARLAND, TEXAS 75040

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 210 DAYTON, OHIO

POSTAGE WILL BE PAID BY ADDRESSEE

Dayco Corporation
Attn: Marketing Services
333 West First Street
Dayton, Ohio 45402

☐ Rush free booklet

from _____

Firm _____

Address _____

City _____ State _____ Zip _____

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 1 CROZET, VA

POSTAGE WILL BE PAID BY ADDRESSEE

Acme Visible Records, Inc.
Dept. CW-79
Crozet, Virginia 22932

**Johnson
Systems, inc.**

7923 Jones Branch Drive
McLean, Virginia 22102
703 821-1700
Telex 89-9100

APEX

1. Eliminates JCL.*
2. Controls Job Preparation
3. Processes Jobs Without Operator Intervention
4. Manages Pre/Post-Processing
5. Coordinates Workload Planning



*APEX replaces all control card handling with the only global JCL edit and syntax checking facility available.

"THE MOST SIGNIFICANT DEVELOPMENT SINCE THE INTRODUCTION OF OS."

NAME _____ TITLE _____
 COMPANY _____
 ADDRESS _____
 CITY _____ STATE _____ ZIP _____
 PHONE () _____
 CPU _____ OPER. SYSTEM _____

**Johnson
Systems, inc.** (703) 821-1700

**Johnson
Systems, inc.**

7923 Jones Branch Drive
McLean, Virginia 22102
703 821-1700
Telex 89-9100

More Than 1500 Data Centers Worldwide Use Johnson Systems Software Products

Because they're easy to use, easy to understand,
and adaptable to meet all their requirements.

Send me information about Johnson Systems':

- ☐ **OS JOB ACCOUNTING REPORT SYSTEM** — a computer utilization and job accounting package that provides performance measurement and comprehensive computer accounting and cost distribution for OS/MVS-SVS-VS1-MVT-MFT users.
- ☐ **DOS JOB ACCOUNTING REPORT SYSTEM** — the most versatile of its type, it provides DOS, DOS/VS and POWER/VS users the capabilities of the OS JOB ACCOUNTING REPORT SYSTEM.
- ☐ **CICS/VS Utilization Monitor and Chargeback System** — enables the DP Manager to account accurately and bill equitable for all resources used by each CICS/VS application and user.

**Johnson
Systems, inc.** (703) 821-1700

Name _____
 Title _____
 Company _____
 Address _____
 City _____
 State _____ Zip _____
 Phone () _____
 CPU _____
 Oper. System _____

W10



MCBA™

Mini-Computer Business Applications, Inc.
4929 Wilshire Boulevard, 9th Floor
Los Angeles, CA 90010 USA
Telephone (213) 936-7131

Page 21

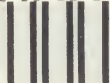
MCBA™ supplies Business Application packages for mini-computers.

- Accounts Receivable
- Order Entry with Inventory Control
- Payroll
- Accounts Payable
- General Ledger

End User and OEM/Distributor inquiries invited. Just check packages of interest, and we'll send you the information.

- ☐ **DEC**® in DIBOL® for RT-11, COS-310, CTS-300 and CTS-500 PDP® 8's & 11's
- ☐ **WANG** in COBOL for the 2200 VS
- ☐ **DG** in COBOL for CS/40/60's and in Extended BASIC for microNOVA's and NOVA's

Name _____
 Company _____
 Address _____
 City _____ State _____
 Zip _____ Phone _____
☐ OEM ☐ End User ☐ Other _____



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 2971 McLEAN, VA

Postage Will be Paid by Addressee

Johnson Systems, inc.

7923 Jones Branch Drive
McLean, Virginia 22102



APEX -
an Automated Planning and Execution Control
System which solves the problems of workload
management by automating the Production
Control of OS and OS/VS Data Centers.



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 2971 McLEAN, VA

Postage Will be Paid by Addressee

Johnson Systems, inc.

7923 Jones Branch Drive
McLean, Virginia 22102



OS JOB ACCOUNTING REPORT SYSTEM - a com-
puter utilization and job accounting package that pro-
vides performance measurement and comprehensive
computer accounting and cost distribution for OS/
MVS-SVS-VSI-MVT-MFT users.

DOS JOB ACCOUNTING REPORT SYSTEM - the
most versatile of its type, it provides DOS, DOS/VS
and POWER/VS users the capabilities of the OS
JOB ACCOUNTING REPORT SYSTEM.

CICS/VS Utilization Monitor and Chargeback System -
enables the DP Manager to account accurately and bill
equitable for all resources used by each CICS/VS ap-
plication and user.



First Class
Permit No. 60947
Los Angeles, CA

BUSINESS REPLY MAIL

No Postage Necessary if Mailed in the United States.

Postage will be paid by—

MCBA™

Mini-Computer Business Applications, Inc.
4929 Wilshire Blvd., 9th Floor
Los Angeles, CA 90010 USA



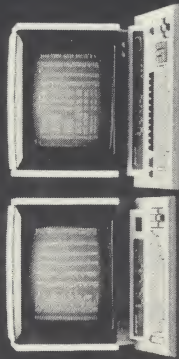
MCBA™

**supplies
Business Application
packages
for mini-computers.**

Order Entry with Inventory Control
Accounts Receivable
Accounts Payable
Payroll
General Ledger

MCBA is a trademark of Mini-Computer Business Appli-
cations, Inc. DEC, PDP and DIBOL are registered trade-
marks of Digital Equipment Corporation.

GET THE FULL PICTURE ON THE WORLD'S BROADEST LINE OF WIDE TERMINALS.



The problem with 80-column terminals is that they're expected to work with 132-column formats.

But our DataMAX™ series of 132-column interactive terminals eliminate costly reformatting.

DataMAX 132A offers upper and lower case 96 character ASCII set. Scrolling of 120 lines/15,840 characters. Character/line editing. Tabbing. And dual brightness control.

DataMAX 132B also has an 11-key numeric pad, 12 function keys. Protected fields. Line/page editing. And optional Burroughs emulation capability.

Both terminals give you characters of unequalled clarity.

Datagraphix®

a General Dynamics subsidiary

SEND FOR MORE FREE INFORMATION.

NAME _____

TITLE _____

COMPANY _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Datagraphix and DataMAX are registered trademarks of Datagraphix, Inc.

Know Who keyed What and When!



Marking Perforator in use with Cummins key/disk system.

The Cummins Perforator marks source documents so you know they've been keyed. The Perforator perforates small holes that form readable characters without obscuring valuable source document data. Mark up to 25 sheets of paper in a single stroke. The Perforator never skips or misses, and perforations are permanent.

Cummins Perforators can mark any or all of the following: type of processing performed, date of processing, run or batch number, operator's number or initials. Other models are available for almost any paper marking application. Send back the card today for information.

Send me a copy of your new brochure on source document marking . . . "Perforate!"

Name _____

Title _____

Company _____

Address _____

City _____ State _____ Zip _____

Telephone (Area _____) _____



CUMMINS
CUMMINS-ALLISON CORP.

Get the book that shows you how to make your computer work harder. It's FREE!

Our new books about **FINANCIAL REPORTING** and **MANUFACTURING** Systems for computers of different types and sizes will show you how to get a higher pay-back from your computer investment. Get your copy . . . you won't be able to put it down!

Please send me free literature about your software systems.

LARGE COMPUTER SYSTEMS —
for users of IBM, BURROUGHS,
DEC, HONEYWELL, UNIVAC and
ICL computers.

Financial

- ☐ General Ledger
- ☐ Payroll/Personnel
- ☐ Accounts Payable
- ☐ Accounts Receivable
- ☐ Fixed Asset Accounting

Manufacturing

- ☐ Material Requirements Planning
- ☐ Master Production Scheduling
- ☐ Capacity Planning
- ☐ Shop Floor Control ☐ Purchasing

SMALL COMPUTER SYSTEMS —
for users of System/3 and
other IBM, Burroughs, Univac
9030, Honeywell 62, HP 3000,
DEC, Interdata, Wang and
most popular business
minicomputers.

- ☐ General Ledger
- ☐ Payroll/Personnel
- ☐ Accounts Payable
- ☐ Accounts Receivable
- ☐ Fixed Asset Accounting

Comprehensive Report Generator
☐ FILETAB

Name _____ Title _____

Company _____

Address _____

City _____ State _____ Zip _____

Phone _____ Computer _____

SOFTWARE
INTERNATIONAL®

Elm Square, Andover, Mass. 01810

CWW79



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 3476 SAN DIEGO, CA

POSTAGE WILL BE PAID BY ADDRESSEE

Datagraphix[®]

Attention: Marketing Services
P.O. Box 82449
San Diego, California 92138



BUSINESS REPLY CARD

FIRST CLASS Permit No. 319 Elk Grove Village, IL

POSTAGE WILL BE PAID BY

CUMMINS-ALLISON CORP.

Data Systems Division
2121 Landmeier Rd.
Elk Grove Village, IL 60007

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



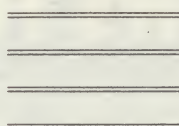
FIRST CLASS
PERMIT NO. 216
Andover, Mass.

BUSINESS REPLY MAIL

NO POSTAGE NECESSARY IF MAILED IN THE U.S.

SOFTWARE
INTERNATIONAL[®]

Elm Square, Andover, Mass. 01810



**REDUCE
APPLICATION
DEVELOPMENT
TIME AND
COSTS BY
60 - 90%
WITH
MARK
iv
SYSTEMS**

informatics inc.
SOFTWARE PRODUCTS
ATT: MARV SMITH
21050 VANOWEN STREET
CANOGA PARK, CA 91304
(213) 887-9121

**ON LINE
DATA BASE**

**MARK
iv
SYSTEMS**

**DOS VS OS
VM VS/9 OS/3**

APPLICATION BACKLOG?

MARK IV BREAKS THE LOGJAM

SUBSTANTIALLY INCREASES PROGRAMMER PRODUCTIVITY
CUTS DESIGN - PROGRAMMING - MAINTENANCE TIME
A COMPLETE APPLICATION DEVELOPMENT SOFTWARE SYSTEM
PAYS FOR ITSELF IN ONE YEAR USED AT 1400 SITES IN 44 COUNTRIES

PLEASE SEND ME INFORMATION
ON MARK IV
I AM ALSO INTERESTED IN:

- ☐ THE IMS INTERFACE
☐ AUDIT SOFTWARE
☐ EEO REPORTING

NAME _____
TITLE _____
PHONE () _____ EXT. _____
COMPANY _____
STREET _____
CITY _____
STATE _____ ZIP _____
COMPUTER _____ OPERATING SYSTEM _____

Look Into a Better Career Offer

McGraw-Edison, a billion dollar manufacturer of diversified Electrical Products has immediate career opportunities for Data Processing Professionals who want growth and technical challenges.

If reply card is gone, send your business card to:

McGRAW-EDISON

Look Into A Better Career Offer

McGRAW-EDISON

By returning this card you could gain a better than average opportunity for career growth in a sophisticated Corporate MIS environment.

Your confidential reply will be answered with the facts about McGraw-Edison—our growth, an opportunity and MIS challenges. An Equal Opportunity Employer M/F

No resume needed

NAME _____
ADDRESS _____ CITY _____
STATE _____ ZIP _____ HOME PHONE _____
PRESENT JOB TITLE _____
Please send me the McGraw-Edison Company facts. My data processing experience is in:
☐ Financial Applications ☐ Manufacturing Applications
☐ Telecommunications ☐ Programming
☐ Systems Design—Analysis

HARDWARE/ SOFTWARE PROFESSIONALS

If the card is missing, you can still get information on the climate for career growth with American Express in Ft.

Lauderdale, Fla./
Phoenix, AZ/NYC

Write for details:



AMERICAN EXPRESS CO.

777 American Expressway
Ft. Lauderdale, Florida 33337
An Equal Opportunity Employer
Male & Female

HARDWARE/ SOFTWARE PROFESSIONALS

The Climate Is Right For Career Growth
With American Express

HARDWARE: IBM 370/138 thru 3033
Mainframes & Minicomputers

SOFTWARE: COBOL - Assembler -
TSO - CICS - SYSGENS - PTF's - IMS -
MVS/VS1 - VTAM/ACF

RETURN THIS CARD TODAY FOR COMPLETE
CAREER INFORMATION!

NAME _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
HOME PHONE _____
CAREER SPECIALTY _____
CURRENT COMPANY _____
JOB TITLE _____ DEGREE _____



AMERICAN EXPRESS CO.

777 American Expressway
Ft. Lauderdale, Florida 33337
An Equal Opportunity Employer/
Male & Female





NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 449 CANOGA PARK, CA

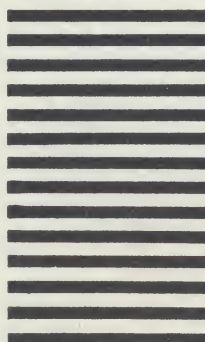
POSTAGE WILL BE PAID BY ADDRESSEE

informatics inc

SOFTWARE PRODUCTS
ATT: MARV SMITH
21050 VANOWEN STREET
CANOGA PARK, CA 91304



A1-CP1-79



**MARK
iv
SYSTEMS**

- MARK IV/OS
- MARK IV/DOS
- MARK IV/IMS
- MARK IV/REPORTER
- MARK IV/AUDITOR
- MARK IV/EEO

ALSO MARK IV FOR UNIVAC,
AMDAHL, ITEL

informatics inc  SOFTWARE
PRODUCTS



FIRST CLASS
PERMIT #796
ELGIN, IL 60120

BUSINESS REPLY MAIL

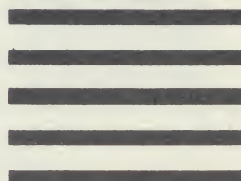
No postage necessary if mailed in the United States

Postage will be paid by—

MANAGER OF EMPLOYMENT

McGRAW-EDISON

1275 Davis Road
Elgin, IL 60120



Look Into a Better Career Offer

McGraw-Edison, a billion dollar manufacturer of diversified Electrical Products has immediate career opportunities for Data Processing Professionals who want growth and technical challenges.

If reply card is gone, send your business card to:

McGRAW-EDISON

FROM: _____

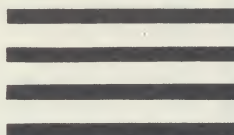


First Class Mail
Permit No 5595
Ft. Lauderdale Fla.

Business Reply Card No Postage Stamp Necessary if Mailed in the United States.

Postage will be paid by:

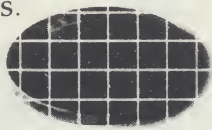
AMERICAN EXPRESS CO.
CARD DIVISION
777 AMERICAN EXPRESSWAY
FT. LAUDERDALE, FLA. 33337



ATTN: PERSONNEL

American Management Systems

The nation's largest builder of fully integrated custom financial systems.

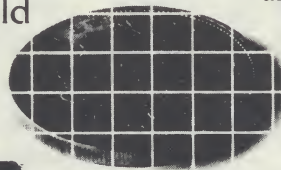


ams

Washington, DC
New York City
Detroit
Chicago
San Francisco

1515 Wilson Blvd. Arlington, VA 22209
(703) 841-6000

If you're looking at financial systems now...and find that your needs are broader than most of today's software packages... We should talk GFS



GFS

GFS is a financial system development tool—a set of integrated software modules for performing the data processing functions common to all financial applications.

Proven, flexible, highly efficient . . . we use GFS in our computer service center to implement and maintain hundreds of clients' financial applications. GFS leverages our staff, as it can yours, by cutting in half the effort needed to build a financial system, and by two thirds the effort to maintain it.

Consider a fully integrated, on-line financial system without limitations or restrictions on end user requirements, compatible within IBM and mini-computer based environments, all with operating efficiency and nationwide support from AMS . . .

We should talk GFS.

NAME _____ POSITION _____
COMPANY _____ TELE (_____) _____
ADDRESS, ZIP _____

Career Opportunities In The Start Up Of A New Data Center



PICKWICK INTERNATIONAL, INC.

CAREER OPPORTUNITIES

When was the last time you played an important role in the start-up of a new Data Center?



PICKWICK INTERNATIONAL, INC.

IT COULD BE NOW

Pickwick International, the world's largest distributor and retailer of consumer records and tapes, and a major division of American Can, is now staffing up to meet the personnel requirements of its new Information Systems and Service Division.

No resume needed

NAME _____
ADDRESS _____
STATE _____ ZIP _____ HOME PHONE _____
PRESENT JOB TITLE _____

AREA OF INTEREST:

____ PROGRAMMING ____ SYSTEMS DESIGN ____ PROJECT LEADER

An Equal Opportunity Employer M/F

DOSSIER

Documentation & Standards Tool

Automating systems maintenance and conversion tasks in more than 325 DOS and DOS/VS shops.

from



Computer Concepts, Inc.
6443 S.W. Beaverton Hwy.
Portland, Oregon 97221
(503) 297-4721

sent for ____ / ____ / ____

by _____ Page 24

IBM DOS USERS

AUTOMATE YOUR SYSTEMS MAINTENANCE AND CONVERSION TASKS

DOSSIER is a Documentation & Standards Tool which translates object code from DOS and DOS/VS program libraries into a series of current and complete installation management reports.

Return this card to receive a detailed brochure.

NAME _____
COMPANY _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
PHONE (____) _____

CW379



First Class Permit
No. 1758
Arlington, VA

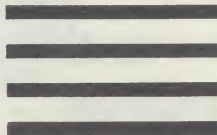
No Postage Necessary if Mailed in the United States

Postage will be paid by:

ams

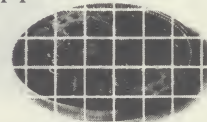
American Management Systems
1515 Wilson Boulevard
Arlington, VA 22209

Attn: Mr. Peter Livengood
Dept. 180-1



American Management Systems

GFS... currently in use in 75 different locations for over 200 custom financial applications



ams

Consulting,
Development
Software
and Services

1515 Wilson Blvd. Arlington, VA 22209
(703) 841-6000



First Class
Permit
10226
Mpls, MN

BUSINESS REPLY CARD

No Postage Necessary if mailed in U.S.A.

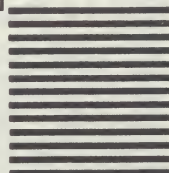
Postage will be paid by—

EMPLOYMENT OPPORTUNITIES

c/o Professional Placement

**PICKWICK
INTERNATIONAL, INC.**

7500 Excelsior Boulevard
Minneapolis, Minnesota 55426



Career Opportunities In The Start Up Of A New Data Center



**PICKWICK
INTERNATIONAL, INC.**



FIRST CLASS
PERMIT NO. A553
PORTLAND,
OREGON

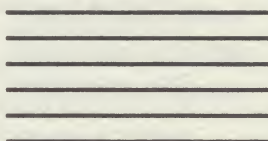
BUSINESS REPLY MAIL

NO POSTAGE STAMP NECESSARY IF MAILED IN UNITED STATES

POSTAGE WILL BE PAID BY -

COMPUTER CONCEPTS, INC.

6443 S.W. BEAVERTON HWY.
PORTLAND, OREGON 97221



IF YOU'RE INTO THE COMPUTER BUSINESS, WE HAVE NEWS FOR YOU:

COMPUTER BUSINESS NEWS

America's fastest growing industry now has its own weekly newspaper, **Computer Business News**. As publishers of **Computerworld**, one of the most successful business publications in the U.S.—as well as several other leading computer publications around the world—we know the computer business. And we created **Computer Business News** to meet what we knew was a strong and growing need for a weekly newspaper covering the computer industry.

Computer Business News is edited to serve key executives in management, engineering, production and marketing at original equipment manufacturers, systems houses, distributors, representatives, internal systems groups at sophisticated end user organizations, and other multiple unit buyers of computer products and services. According to International Data Corporation, the world's leading EDP market research firm, this marketplace is over \$4 billion now, and should grow rapidly to \$9 billion in 1981! So the need for good, up-to-date information is especially important. Every week it provides all the computer news—and nothing but computer news—in a way no other publication can match.

Computer Business News' newspaper format, high-speed printing and rapid, paid-circulation distribution system have unique advantages for both readers and advertisers.

Computer Business News covers all the late-breaking news of new products, the latest technical developments, changes in management and company acquisitions, national and industry economic trends, financial reports, government relations and regulations (including their impact), marketing trends and strategies, and international news. All in one easy-to-scan, up-to-the-minute package delivered fresh each week.

This material is researched and prepared by an experienced professional staff, led by Editor W. David Gardner, a well-known, respected computer industry reporter and analyst. Dave maintains editorial offices in New York and California, to make sure of complete, late-breaking coverage of both coasts.

If what goes on in the computer industry is important to you, then you need the information **Computer Business News** can give you. And no other publication will give you that information as completely, efficiently and quickly.

*To subscribe to **Computer Business News**, take out your American Express, Master Charge or Visa Card and call us (toll free) at 1-800-225-3080. Whether you write or call, you will qualify for the Special Charter Subscriber rate of only \$15 for a full year's subscription—52 weekly issues. This saves you \$10 over regular rates, and brings the cost down to less than 30c an issue.*

*To get more information about **advertising** in **Computer Business News**, you can send in the card or call Roy Einreinhofer, Vice President of Marketing at (617) 965-5800. He'll show you how **Computer Business News** can be an unusually efficient vehicle to reach multiple unit buyers of computer products and services—"The OEM Marketplace"—as it has traditionally been called. You get a highly interested, paid audience, no waste circulation and a quality editorial environment.*

ComputerBusinessNews

797 Washington Street, Newton, MA 02161



COMPUTERWORLD
THE MONTHLY FOR THE COMPUTED COMMUNITY

**New IBM Processors
Flash Out But As/6
But Amudahl Stands Pat**

NCIC Audit, Expansion Pending

**Wang, HIS Extend Options
Systems, Raw**

Upgrade Offered

- 11 President/Owner/Partner/General Manager
- 12 VP/Assistant VP
- 13 Treasurer/Controller/Finance Officer
- 21 Director/Manager of Operation/Planning/
Administrative Service
- 22 Director/Manager/Supervisor DP
- 32 Systems Manager/Systems Analyst
- 31 Manager/Supervisor Programming
- 32 Programmer/Methods Analyst
- 41 Application Engineer
- 42 Other Engineering
- 51 Mfg Sales Representative
- 52 Other Sales/Marketing
- 60 Consultant
- 70 Lawyer/Accountant
- 80 Librarian/Educator/Student
- 90 Other